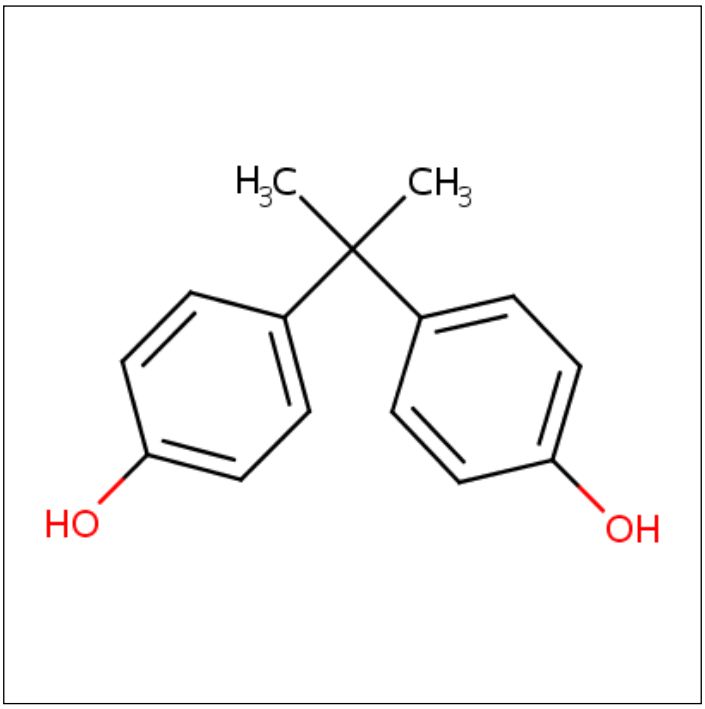
Bisphenol A

80-05-7 | DTXSID7020182



Preferred Name:	Bisphenol A
Smiles:	CC(C)(C1=CC=C(O)C=C1)C1=CC=C(O)C=C1
InChi:	InChI=1S/C15H16O2/c1-15(2,11-3-7-13(16)8-4-11)12-5-9-14(17)10-6-12/h3-10,16-17H,1-2H3
InChi Key:	IISBACLAFKSPIT-UHFFFAOYSA-N
IUPAC Name:	4,4'-propane-2,2-diyldiphenol
Molecular Formula:	C15H16O2
Average Mass:	228.29100036621094 g/mol

Synonyms

BPA
4,4'-Propane-2,2-diyldiphenol
Phenol, 4,4'-(1-methylethylidene)bis-
(4,4'-Dihydroxydiphenyl)dimethylmethane
2,2-Bis(4'-hydroxyphenyl) propane
2,2'-Bis(4-hydroxyphenyl)propane
2,2-BIS-(4-HYDROXY-PHENYL)-PROPANE
2,2-Bis(4-hydroxyphenyl)propane
2,2-Bis(p-hydroxyphenyl)propane
2,2-Di(4-Hydroxyphenyl) Propane
2,2-DI(4-HYDROXYPHENYL)PROPANE
2,2-Di(4-phenylol)propane
4,4'-(1-Methylethylidene)bisphenol
4,4'-Bisphenol A
4,4'-DIHYDROXYPHENYL-2,2-PROPANE
4,4'-isopropilidendifenol
4,4'-Isopropylidendiphenol
4,4'-Isopropylidene bisphenol
4,4-ISOPROPYLIDENE DIPHENYL
4,4'-Isopropylidenebis[phenol]
4,4'-isopropylidenediphenol
4,4'-Methylethylidenebisphenol
Bis(4-hydroxyphenyl)dimethylmethane
Bis(p-hydroxyphenyl)propane
BIS[PHENOL], 4,4'-(1-METHYLETHYLIDENE)-
BISPHENOL, 4,4'-(1-METHYLETHYLIDENE)-
BISPHENOL-A
Diphenol methylethylidene
Diphenylolpropane
Hidorin F 285
Isopropylidenebis(4-hydroxybenzene)
NSC 1767
NSC 17959
p,p'-Bisphenol A

p,p'-Dihydroxydiphenylpropane
P,P'-ISOPROPYLIDENE DIPHENOL
p,p'-Isopropylidenebisphenol
p,p'-Isopropylidenediphenol
Parabis
Parabis A
Phenol, 4,4'-isopropylidenedi-
Pluracol 245
Rikabanol
,'-Bis(p-hydroxyphenyl)propane
4-06-00-06717
Biphenol A
Bis(4-hydroxyphenyl) dimethylmethane
beta,beta'-Bis(p-hydroxyphenyl)propane
2,2-Bis(hydroxyphenyl)propane
Bis(4-hydroxyphenyl)propane
Bisphenol
BRN 1107700
p,p'-Dihydroxydiphenyldimethylmethane
4,4'-Dihydroxydiphenyldimethylmethane
2,2-(4,4'-Dihydroxydiphenyl)propane
4,4'-Dihydroxydiphenylpropane
4,4'-Dihydroxydiphenyl-2,2-propane
beta-Di-p-hydroxyphenylpropane
Dimethyl bis(p-hydroxyphenyl)methane
Dimethylbis(p-hydroxyphenyl)methane
Dimethylmethylene-p,p'-diphenol
EINECS 201-245-8
4,4'-Isopropylidene diphenol
4,4'-Isopropylidenebisphenol
NCI-C50635
Phenol, 4,4'-dimethylmethylenedi-
Phenol, (1-methylethylidene)bis-
Propane, 2,2-bis(p-hydroxyphenyl)-
Ucar bisphenol A
Ucar bisphenol HP
2,2-Bis-4'-hydroxyfenylpropan
Bisferol A
UNII-MLT3645I99

Hazard

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

CheLIST combination of 2 files from JRC Projects list

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	JRC METABOLISM BIOACCUMULATION
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	JRC HEPATOTOX
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from EU Reseearch lists

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	DGENV EAS
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	FP6 ReProTect
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED

SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CPDB Report on Carcinogenicity Potency URL (Univ. Cal., Berkeley)

Result Group

Component Name	Value
Report on Carcinogenicity (RoC) Potency URL	*External Link*

DSSTox Cancer Potency Database Summary

Result Group

Component Name	Value
ActivityCategory_MultiCellCall	0.0
ActivityCategory_MultiCellCall_Details	multisex inactive; multispecies inactive
ActivityCategory_SingleCellCall	0.0
Endpoint	TD50; Tumor Target Sites
Mutagenicity_SAL_CPDB	negative
NTP Report Number	TR 215
Species	rat; mouse
StudyType	Carcinogenicity
TargetSites_Mouse_Female	no positive results
TargetSites_Mouse_Male	no positive results
TargetSites_Rat_Female	no positive results
TargetSites_Rat_Male	no positive results
TD50_Mouse_Note	no positive results
TD50_Rat_Note	no positive results

DSSTox Cancer Potency Database URL

Result Group

Component Name	Value
Cancer Potency Database URL	*External Link*

DSSTox NCTR Estrogen Receptor Database

Result Group

Component Name	Value
ActivityCategory_ER_RBA	active weak
ActivityCategory_Rationale_ChemClass_ERB	Diphenolalkanes are relatively weak binders, 4-OH critical for binding, RBA inhibited by steric bulk as in 2,6-di-tertbutylphenol, bulk at bridge atom increases RBA similar to 7a substitution on E2.
ChemClass_ERB	Diphenylmethanes Diphenolalkanes
Endpoint	Estrogen Receptor Relative Binding Affinity
ER_RBA	0.0078
F1_Ring	1.0
F2_AromaticRing	1.0
F3_PhenolicRing	1.0
F4_Heteroatom	0.0
F5_Phenol3nPhenyl	1.0
F6_OtherKeyFeatures	0.0
LOGP	3.64
LOG_ER_RBA	-2.11
Mean_ER_RBA_ChemClass	0.0087
Species	rat
StudyType	Receptor Binding

DSSTox NTP BSI GeneTox Index

Result Group

Component Name	Value
NTP_StudyArea_GeneTox	Study Report Available

DSSTox NTP BSI Chronic / Cancer Study Index

Result Group

Component Name	Value
NTP_StudyArea_CancerChronicTox	Study Report Available

DSSTox NTP BSI DevTox Study Index

Result Group

Component Name	Value
NTP_StudyArea_DevelopTox	Study Report Available

DSSTox NTP BSI URL

Result Group

Component Name	Value
NTP Bioassay URL	*External Link*

DSSTox IRIS Study Summaries

Result Group

Component Name	Value
DrinkingWater_OralSlope_Assessed	0.0
DrinkingWater_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Endpoint	cancer; acute; short-term; sub-chronic; chronic; developmental
Inhalation_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Inhalation_RfC_Assessed	0.0

Inhalation_RfC_CriticalEffects	Not assessed under the IRIS program.
Inhalation_UnitRisk_Assessed	0.0
Oral_RfD_Assessed	1.0
Oral_RfD_Confidence	High
Oral_RfD_CriticalEffects	decreased mean body weight
Oral_RfD_mg_per_kg_day	0.05 mg/kg-bw/day
Oral_RfD_mmol_per_kg_day	2.19E-4 mmol/kg-bw/day
Oral_RfD_Notes	LOAEL (Lowest observed adverse effect level): 50 mg/kg-day
Species	rodent; human; dog; rabbit
StudyType	Human Health Exposure Toxicity Review for Risk Assessment
TotalAssessments	1.0
WtOfEvidence_1986GuidelineCategories	Not assessed under the IRIS program.
WtOfEvidence_Cancer_Assessed	0.0

DSSTox IRIS URLs

Result Group

Component Name	Value
IRIS URL	*External Link*

EDSPDB Summary endocrine disruption information from the literature; from EDSPDB

Result Group

Component Name	Value
CAS_number	80057
DOSE_FLAG	4550
Endo_Abstract	; Kidney, Ureter, Bladder - other changes in urine composition; Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol); Endocrine - other changes
Endo_AbsType	OTHER MULTIPLE DOSE TOXICITY D
Endo_Compartment	Endocrine
Endo_Effect	Endocrine - other changes
Endo_EffLevelRep	4550
Endo_EffLevelUnits	mg/kg/26W-I
Endo_Endpoint	LOAEL
Endo_Female	FALSE
Endo_Final_Dose	4550
Endo_Final_Units	mg/kg bw/day
Endo_Male	FALSE
Endo_Obs/Dose	26W
Endo_Outcome	Positive
Endo_Prim_Ref	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year: 33(7),25,1968
Endo_Rank	158
Endo_Reference	RTECS (1999-4)
Endo_Route	Oral
Endo_RTECS_Num	SL6300000
Endo_Species	Rodent - rabbit
ENDPT_PREF	1
loael	FALSE
negative	FALSE
noael	FALSE
positive	FALSE
ranked	TRUE
ref_rank	4
ValidCAS	TRUE

EDSPDB Reproductive Toxicity Ranking

Result Group

Component Name	Value
RepDev_Abstract	Bisphenol A was evaluated for developmental toxicity in CD rats (0, 160, 320, or 640 mg/kg/day) and CD-1 mice (0, 500, 750, 1000, or 1250 mg/kg/day) dosed daily by gastric intubation on gestational days 6 through 15. Timed-pregnant dams were sacrificed 1 day prior to parturition, the uterine contents were examined, and all fetuses were examined for external, visceral, and skeletal malformations. In rats, maternal weight gain during gestation, weight gain corrected for gravid uterine weight, and weight gain during treatment were significantly reduced at all bisphenol A doses. Gravid uterine weight and average fetal body weight per litter were not affected by bisphenol A. No increase in percentage resorptions per litter or percentage fetuses malformed per litter was detected. In mice, maternal mortality occurred at all bisphenol A doses, reaching 18% at the high dose, which also produced a significant decrease in maternal body weight gain during gestation and treatment. Weight gain corrected for gravid uterine weight was not affected by bisphenol A. Reductions in gravid uterine weight and average fetal body weight were observed with the 1250 mg/kg dose of bisphenol A. Relative maternal liver weight was increased at all doses of bisphenol A. There was a significant increase in the percentage of resorptions per litter with 1250 mg bisphenol A/kg/day. Bisphenol A treatment at maternally toxic dose levels during organogenesis produced fetal toxicity in mice but not in rats and did not alter fetal morphologic development in either species. [Morrissey RE et al; Fund Appl Toxicol 8 (4): 571-82 (1987)] **PEER REVIEWED**
RepDev_AbsType	Non-Human Toxicity Excerpt
RepDev_Compartment	Developmental
RepDev_Condition	Pregnant
RepDev_DoseReg	Bisphenol A was evaluated for developmental toxicity in CD rats (0, 160, 320, or 640 mg/kg/day) and CD-1 mice (0, 500, 750, 1000, or 1250 mg/kg/day) dosed daily by gastric intubation on gestational days 6 through 15.

RepDev_Effect	There was a significant increase in the percentage of resorptions per litter with 1250 mg bisphenol A/kg/day. Bisphenol A treatment at maternally toxic dose levels during organogenesis produced fetal toxicity in mice but not in rats and did not alter fetal morphologic development in either species
RepDev_EffLevelRep	1250
RepDev_EffLevelUnits	mg/kg/day
RepDev_Endpoint	LOAEL
RepDev_Female	TRUE
RepDev_Final_Dose	1250
RepDev_Final_Units	mg/kg bw/day
RepDev_Male	FALSE
RepDev_Obs/Dose	gestational days 6 through 15
RepDev_Outcome	Positive
RepDev_Prim_Ref	Morrissey RE et al; Fund Appl Toxicol 8 (4): 571-82 (1987)
RepDev_Rank	333
RepDev_Reference	HSDB - 10/1999
RepDev_Route	gastric intubation
RepDev_Species	mice
RepDev_Strain	CD-1

Canada Domestic Substance List (2007)

Result Group

Component Name	Value
Bioaccumulative	No
Human Health Priorities	High
Inherently Toxic to Aquatic Organisms	Yes
Meets CEPA Categorization Criteria	Yes
Meets Environmental Criteria for Categorization	No
Meets Human Health Criteria	Yes
Persistent	No
Substance category	Organics

Acute Toxicity Data from EPA HPVIS

Result Group

Component Name	Value
Concentration Result Type	LD
Concentration Units	mg/kg-bw
Concentration Value Description	=
Dose Remarks	2150 3160 4640 6810
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	LD50 (males) = 4100 mg/kgLD50 (females) = 3300 mg/kg The calculated LD50 values were 4 100 mg/kg in males and 3 300 mg/kg in females. No other aspects of the study were reported.
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	NTP. 1982. Carcinogenesis Bioassay of Bisphenol A (CAS No. 80-05-7) in F344 Rats B6C3F1 Mice (Feed Study). National Toxicology Program. Technical Report No. 215 Order No. PB82-184060 (NTIS) 1-116. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	# Animals: 5/sex Rats (5 per sex per group) were given 2 150 3 160 4 640 or 6 810 mg/kgof bisphenol A.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	Value
Concentration Result Type	LD
Concentration Units	mg/kg-bw
Concentration Value Description	=
Dose Remarks	2150 3160 4640 6810
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	LD50 (males) = 4100 mg/kgLD50 (females) = 3300 mg/kg The calculated LD50 values were 4 100 mg/kg in males and 3 300 mg/kg in females. No other aspects of the study were reported.
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics

Sponsored Chemical Result Type	Measured
Study Reference	NTP. 1982. Carcinogenesis Bioassay of Bisphenol A (CAS No. 80-05-7) in F344 Rats B6C3F1 Mice (Feed Study). National Toxicology Program. Technical Report No. 215 Order No. PB82-184060 (NTIS) 1-116. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	# Animals: 5/sex Rats (5 per sex per group) were given 2 150 3 160 4 640 or 6 810 mg/kgof bisphenol A.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	Value
Concentration Result Type	LD
Concentration Units	mg/kg-bw
Concentration Value Description	=
Gender	No Data
GLP	No
Mammalian Strain	No Data
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Route of Administration	Oral
Species or in Vitro System	Rabbit
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Mellon Institute of Industrial Research. 1948. The Acute and Subacute Toxicity of Diphenylol Propane. Study No. 11-13. Union Carbide Corporation Unpublished Report. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	A rabbit LD50 value was obtained. No other details are reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	Value
Concentration Result Type	LC
Concentration Units	mg/L
Concentration Value Description	>
Dose Remarks	0 170 mg/L
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	The mass median aerodynamic diameter (MMAD) of the test substance was 3.9 micrometers (m) and the exposure concentration used was the highest attainable by the investigators with the test system used. Half the animals were necropsied on the day following exposure and the rest on day 14. Microscopic examination was limited to the respiratory tract (nasal turbinates larynx trachea and lungs) and associated tissues. No deaths occurred and therefore the LD50 value for rats is >170 mg/m3 for 6 hours. No gross signs of toxicity were observed. At necropsy "slight" inflammation of the epithelium lining of the anterior portion of the nose and "slight ulceration" of the oronasal duct were reported in 5/5 males and 4/5 females exposed to 170 mg/m3 and sacrificed on day 2. No exposure-related effects were observed in animals necropsied on day 14.
Route of Administration	Inhalation
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Nitschke K.D. Quast J.F. and Wolfe E.L. 1985. Bisphenol A: Acute Aerosol Toxicity Study with Fischer 344 Rats. Dow Chemical Company Unpublished Report. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Groups of 10 male and female Fischer F344 rats were exposed wholebody to Bisphenol A dust at concentrations of 0 or 170 mg/m3.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	Particulate

Repeat Toxicity Data from HPVIS

Result Group

Component Name	Value
Concentration Result Type	LOAEL
Concentration Units	ppm
Concentration Value Description	=
Conclusion	The LOAEL for BPA was considered to be 50 mg/kg/day. The Oral RfD was established at 0.05 mg/kg/day by IRIS.
Dose Remarks	0 1000 or 2000 ppm (approximately 50 and 100 mg/kg/day)
Exposure Period Units	Weeks

Frequency of Treatment	Daily
Gender	Both M/F
GLP	No
Mammalian Strain	Fischer 344
Method/Guideline Followed	Other
Population	Parental (F0)
Program Flag	HPVIS
Reliability	2
Results Remarks	All treated groups of rats had reduced body weights compared with controls evident from the 5th week of exposure. Food consumption was also reduced compared with controls but this effect was not observed until the 12th week of treatment. Reduced body weights in rats therefore was considered a direct adverse effect of exposure to bisphenol A.
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Study Reference	Integrated Risk Information System (IRIS Document); Bisphenol A. CASRN: 80-05-7. 1993. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Control Group: Yes Concurrent no treatmentMethod: Chronic study protocol from NTP The following was summarized for the IRIS Risk Assessment: In this 103-week dietary study groups of 50 rats/sex were fed diets containing 0 1000 or 2000 ppm bisphenol A.
Test Substance Purity	Bisphenol A
Type of Exposure	In Food
Year Study Performed	1982

Genotoxicity Data In Vitro from EPA HPVIS

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	This study was judged to have given a negative result since the observed increase in the first experiment was not reproducible.
Dose Remarks	30 - 50 g/mL with activation20 - 40 g/mL without activation
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	With metabolic activation: 50 g/mLWithout metabolic activation: None reported In the first test with metabolic activation an increase in the percentage of metaphases with chromosome aberrations from bisphenol A treated cultures was observed only at the top dose in the presence of cytotoxicity; 14% at 50 g/mL compared to 3% in controls. In these high-dose cultures it was stated that cell confluence was reduced by approximately 70%. In the second test no significant increases were observed in with metabolic activation; only 3% of cells at the highest dose had aberrations. No significant increases in aberrations were observed without metabolic activation with bisphenol A evidently being tested up to "toxic levels." The positive controls produced clear increases in chromosome aberrations.
Species	Mammalian Cell Line
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	Chinese Hamster Ovary (CHO)
Study Reference	Ivett J.L. Brown B.M. Rodgers C. Anderson B.E. Ressnick M.A. and Zeiger E. 1989. Chromosomal aberrations and sister chromatid exchange tests in Chinese hamster ovary cells in vitro. IV. Results with 15 chemicals. Environ. Mol. Mutagen. 14:165-187. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	In a chromosome aberration study in Chinese hamster ovary (CHO) cells were exposed in two separate experiments to 30-50 g/mL bisphenol A for 2 hours with metabolic activation and 20-40 g/mL for 8 hours without metabolic activation. Cells were harvested at 11 hours with metabolic activation and 21 hours without metabolic activation.
Test Substance Purity	Bisphenol A
Type of Study	in vitro mammalian chromosome aberration test

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 333 g/plate
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Positive, Negative and Solvent Control Substance(s)	Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Program Flag	HPVIS
Reliability	2

Results Remarks	Cytotoxicity conc.: With and without metabolic activation: 333 g/plate At 333 g/plate slight and complete clearance of the background lawn was observed in all strains with (rat and hamster liver S9) and without metabolic activation respectively. No increase in the number of revertants was seen in any of the tested cultures. Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 100
Study Reference	Haworth S. Lawlor T. Mortelmans K. Speck W. and Zeiger E. 1983. Salmonella mutagenicity test results for 250 chemicals. Environ. Mutagen. 1:3-142. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	The pre-incubation method with Salmonella typhimurium strains TA98 TA100 TA1535 and TA1537 was used at bisphenol A concentrations up to 333 ?g/plate in the presence and absence of metabolic activation (Aroclor induced rat and hamster liver S9).
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 1538
Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	e. coli WP2 uvr A
Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.

Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

Reproductive Toxicity Data In Vitro from EPA HPVIS

Result Group

Component Name	**Value**
Administration Method	In Food
Company Name	General Electric Company - Plastics
Concentration Result Type	NOAEL
Concentration Units	ppm
Concentration Value Description	=
Conclusion	Exposure to dietary BPA for three generations one litter per generation resulted in adult systemic toxicity only at 750 and 7500 ppm. Because of the lack of adverse effects below these doses the adult systemic toxicity NOAEL (no observable adverse effect level) was established at 75 ppm (equivalent to approximately 5 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. Similarly because there were no treatment- or dose-related reproductive or postnatal toxicity effects below 7500 ppm the reproductive and postnatal toxicity NOAELs were concluded to be 750 ppm (equivalent to approximately 50 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. There were no effects of BPA dietary exposure on any adult or offspring parameter at 0.015 0.3 4.5 or 75 ppm (resulting in BPA intakes of approximately 0.001 0.02 0.3 or 5 mg/kg/day respectively).
Dose Remarks	0 0.15 0.3 4.5 75 750 or 7500 ppm (0 0.001 0.02 0.3 5 50 or500 mg/kg/day)
Exposure Period Units	Weeks
Frequency of Treatment	ad libitum
Gender	Both M/F
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	OECD 416
Population	Parental (F0)
Program Flag	HPVIS
Reliability	1
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsored Chemical Result Type	Measured
Study Reference	R.W. Tyl Ph.D. DABT C.B. Myers M.S M.C. Marr B.A. LATG. 2000. Three-Generation Reproductive Toxicity Study of Dietary Bisphenol A in CD Sprague-Dawley Rats. RTI Report #: 65C-07036000. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Study Reference	2-Propanone reaction products with phenol
Submission Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	7500 ppm (approximately 500 mg/kg/day). Adult systemic toxicity (F0 F1 F2 and F3) was expressed as consistent and persistent reduced body weights and weight gains typically greater than 15% occasional reductions in feed consumption as g/day and occasional increases in feed consumption as g/kg/day. Food efficiency was occasionally reduced. For non-reproductive organs absolute organ weights were consistently reduced in both sexes while relative organ weights were commonly increased. Histopathologic findings on non-reproductive organs included increased incidence of renal tubular degeneration and chronic hepatic inflammation only in F0 F1 and F2 females (but not F3). There were no treatment- or dose-related direct effects on reproductive organ weights histopathology or function. Consistent with the reduced body weights and body weight gains in this group paired ovarian weights were significantly reduced for F0 F1 and F2 females (absolute and relative weights) and for F3 females (absolute weights only). Paired ovarian follicle counts (ten females each at 0 and 7500 ppm) were significantly increased at 7500 ppm in F0 females but were unaffected in F1 F2 and F3 females. There were no effects of treatment on any andrological parameters at any dose in any generation (except for significantly reduced epididymal sperm counts only in F1 males at 7500 ppm and for significantly reduced daily sperm production per testis but not efficiency of daily sperm production only in F3 males at 7500 ppm). The only reproductive effect was a significant decrease in total and live pups per litter (with no significant increase in prenatal postimplantation loss per litter) on pnd 0 and 4 (precull) for F1 F2 and F3 litters at 7500 ppm associated with reduced uterine weight in parental F0 F1 and F2 females. There were no effects on mating fertility or gestational indices on precoital interval gestational length offspring sex ratios or on nipple and/or areola retention in preweanling F1 F2 and F3 male pups. The only offspring effects at 7500 ppm included statistically significant reductions in pup body weights per litter beginning on pnd 7 for F1 F2 and F3 offspring and statistically significant delayed acquisition of both vaginal patency and preputial separation for F1 F2 and F3 postweanling pups. Anogenital distance (measured in F2 and F3 offspring on pnd 0) was unaffected for F2 and F3 males and for F3 females. Only F2 female anogenital distance was significantly increased by 0.03 mm at 0.015 0.3 and 4.5 ppm and by 0.04 mm at 750 ppm versus the control value. Although statistically significant these variations were only 0.03 to 0.04 mm and were considered to be due to the extremely precise measurement technique used and were not considered to be of biological or toxicological significance. These changes (referring to preputial separation vaginal patency and anogenital distance) did not affect reproductive function in the animals exhibiting them. The effects observed on reproductive function or postnatal toxicity were present in a clearly toxic dose (adult systemic toxicity) and were not observed at doses below 7500 ppm.

Test Methods	Exposure Period: F0 males: 15 weeks; F0 females: 18 weeksF1 & F2 males: 18 weeks; F1 & F2 females: 21 weeksF3 males & females: 13 weeksControl Group: Yes concurrent vehicle Test procedure: Exposure to bisphenol A began for the F0 generation atabout 7 weeks of age and continued throughout a 10-week pre-breed exposure period a 2-week mating period (when F0 animals were mated [one male and one female] within each dose group) and gestation. F0 males were sacrificed after the F1 delivery period. Exposure of F0 females to bisphenol A continued throughout lactation until weaning (post-natal day 21) when F0 animals were sacrificed. Selected F1 animals were similarly mated to produce the F2 generation and selected F2 animals were mated to produce the F3 generation. The same exposure regime was used for F1 and F2 animals with direct exposure to bisphenol A in the diet commencing approximately at post-natal day 21. Selected F3 animals were exposed to bisphenol A only for a 10-week period from weaning as they were not mated. For the F0 generation and retained F1 F2 and F3 animals clinical signs of toxicity body weights and food consumption were reported. Estrous cycles were monitored in the last 3 weeks of the pre-breed exposure period and during the mating period for all generations. At the necropsy of adult animals sperm samples were taken for analysis of epididymal sperm number motility (using a computer assisted sperm motion analysis system) and morphology testicular-resistant spermatid head counts daily sperm production and efficiency of daily sperm production a number of organs were weighed and selected organs were examined histopathologically. Parameters assessed in the young offspring included litter size body weights survival gross appearance anogenital distance (AGD) (in F2 and F3 offspring only) sexual development and for animals killed at weaning gross appearance of organs at necropsy with attention given to reproductive
Test Substance Purity	Bisphenol A (99.5% pure)

Result Group

Component Name	**Value**
Administration Method	In Food
Company Name	General Electric Company - Plastics
Concentration Result Type	NOAEL
Concentration Units	ppm
Concentration Value Description	=
Conclusion	Exposure to dietary BPA for three generations one litter per generation resulted in adult systemic toxicity only at 750 and 7500 ppm. Because of the lack of adverse effects below these doses the adult systemic toxicity NOAEL (no observable adverse effect level) was established at 75 ppm (equivalent to approximately 5 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. Similarly because there were no treatment- or dose-related reproductive or postnatal toxicity effects below 7500 ppm the reproductive and postnatal toxicity NOAELs were concluded to be 750 ppm (equivalent to approximately 50 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. There were no effects of BPA dietary exposure on any adult or offspring parameter at 0.015 0.3 4.5 or 75 ppm (resulting in BPA intakes of approximately 0.001 0.02 0.3 or 5 mg/kg/day respectively).
Dose Remarks	0 0.15 0.3 4.5 75 750 or 7500 ppm (0 0.001 0.02 0.3 5 50 or500 mg/kg/day)
Exposure Period Units	Weeks
Frequency of Treatment	ad libitum
Gender	Both M/F
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	OECD 416
Population	Offspring (F1)
Program Flag	HPVIS
Reliability	1
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsored Chemical Result Type	Measured
Study Reference	R.W. Tyl Ph.D. DABT C.B. Myers M.S M.C. Marr B.A. LATG. 2000. Three-Generation Reproductive Toxicity Study of Dietary Bisphenol A in CD Sprague-Dawley Rats. RTI Report #: 65C-07036000. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Study Reference	2-Propanone reaction products with phenol
Submission Name	Toxicology/Regulatory Services Inc.

Test Conditions Remarks	7500 ppm (approximately 500 mg/kg/day). Adult systemic toxicity (F0 F1 F2 and F3) was expressed as consistent and persistent reduced body weights and weight gains typically greater than 15% occasional reductions in feed consumption as g/day and occasional increases in feed consumption as g/kg/day. Food efficiency was occasionally reduced. For non-reproductive organs absolute organ weights were consistently reduced in both sexes while relative organ weights were commonly increased. Histopathologic findings on non-reproductive organs included increased incidence of renal tubular degeneration and chronic hepatic inflammation only in F0 F1 and F2 females (but not F3). There were no treatment- or dose-related direct effects on reproductive organ weights histopathology or function. Consistent with the reduced body weights and body weight gains in this group paired ovarian weights were significantly reduced for F0 F1 and F2 females (absolute and relative weights) and for F3 females (absolute weights only). Paired ovarian follicle counts (ten females each at 0 and 7500 ppm) were significantly increased at 7500 ppm in F0 females but were unaffected in F1 F2 and F3 females. There were no effects of treatment on any andrological parameters at any dose in any generation (except for significantly reduced epididymal sperm counts only in F1 males at 7500 ppm and for significantly reduced daily sperm production per testis but not efficiency of daily sperm production only in F3 males at 7500 ppm). The only reproductive effect was a significant decrease in total and live pups per litter (with no significant increase in prenatal postimplantation loss per litter) on pnd 0 and 4 (precull) for F1 F2 and F3 litters at 7500 ppm associated with reduced uterine weight in parental F0 F1 and F2 females. There were no effects on mating fertility or gestational indices on precoital interval gestational length offspring sex ratios or on nipple and/or areola retention in preweanling F1 F2 and F3 male pups. The only offspring effects at 7500 ppm included statistically significant reductions in pup body weights per litter beginning on pnd 7 for F1 F2 and F3 offspring and statistically significant delayed acquisition of both vaginal patency and preputial separation for F1 F2 and F3 postweanling pups. Anogenital distance (measured in F2 and F3 offspring on pnd 0) was unaffected for F2 and F3 males and for F3 females. Only F2 female anogenital distance was significantly increased by 0.03 mm at 0.015 0.3 and 4.5 ppm and by 0.04 mm at 750 ppm versus the control value. Although statistically significant these variations were only 0.03 to 0.04 mm and were considered to be due to the extremely precise measurement technique used and were not considered to be of biological or toxicological significance. These changes (referring to preputial separation vaginal patency and anogenital distance) did not affect reproductive function in the animals exhibiting them. The effects observed on reproductive function or postnatal toxicity were present in a clearly toxic dose (adult systemic toxicity) and were not observed at doses below 7500 ppm.
Test Methods	Exposure Period: F0 males: 15 weeks; F0 females: 18 weeksF1 & F2 males: 18 weeks; F1 & F2 females: 21 weeksF3 males & females: 13 weeksControl Group: Yes concurrent vehicle Test procedure: Exposure to bisphenol A began for the F0 generation atabout 7 weeks of age and continued throughout a 10-week pre-breed exposure period a 2-week mating period (when F0 animals were mated [one male and one female] within each dose group) and gestation. F0 males were sacrificed after the F1 delivery period. Exposure of F0 females to bisphenol A continued throughout lactation until weaning (post-natal day 21) when F0 animals were sacrificed. Selected F1 animals were similarly mated to produce the F2 generation and selected F2 animals were mated to produce the F3 generation. The same exposure regime was used for F1 and F2 animals with direct exposure to bisphenol A in the diet commencing approximately at post-natal day 21. Selected F3 animals were exposed to bisphenol A only for a 10-week period from weaning as they were not mated. For the F0 generation and retained F1 F2 and F3 animals clinical signs of toxicity body weights and food consumption were reported. Estrous cycles were monitored in the last 3 weeks of the pre-breed exposure period and during the mating period for all generations. At the necropsy of adult animals sperm samples were taken for analysis of epididymal sperm number motility (using a computer assisted sperm motion analysis system) and morphology testicular-resistant spermatid head counts daily sperm production and efficiency of daily sperm production a number of organs were weighed and selected organs were examined histopathologically. Parameters assessed in the young offspring included litter size body weights survival gross appearance anogenital distance (AGD) (in F2 and F3 offspring only) sexual development and for animals killed at weaning gross appearance of organs at necropsy with attention given to reproductive
Test Substance Purity	Bisphenol A (99.5% pure)

Developmental Toxicity / Teratogenicity Data In Vitro from EPA HPVIS

Result Group

Component Name	**Value**
Concentration Result Type	LOAEL
Concentration Units	mg/kg bw/day
Concentration Value Description	=
Conclusion	No evidence of developmental toxicity in the rat was evident at exposure levels which are toxic to the mother. A maternal no effect level could not be identified; the LOAEL of 160 mg/kg based on clinical signs of toxicity and a statistically significant decrease (26%) in body weight gain was identified. No fetal effects were seen at the highest dose level evaluated 640 mg/kg.
Dose Remarks	0 160 320 640 or 1280 mg/kg/day
Exposure Period Units	Days
Frequency of Treatment	Daily
Gender	Female
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	No Data
Population	Female (Maternal)
Post-Exposure/Depuration Period Units	Days
Program Flag	HPVIS
Reliability	1

Results Remarks	Range-finding study: groups of 8 time-mated CD rats were gavaged with0 500 1000 1500 2000 2500 or 3000 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were examined for gross morphological abnormalities only. Deaths were observed in 1 5 3 and 5 rats at 1 500 2 000 2 500 and 3 000 mg/kg respectively. Clinical signs of toxicity were observed at all doses and included diarrhea lacrimation lethargy rough coat wheezing wet urogenital area arched back dyspnea bloody nose disorientation alopecia piloerection and vaginal bleeding. A statistically significant decrease in maternal body weight gain (24%) was observed at 1000 mg/kg and above during the gestation period and during the treatment period a decrease in maternal body weight was observed at 1500 mg/kg and above. No deaths were observed in the 0 160 320 and 640 mg/kg dose groups. At 1280 mg/kg deaths were observed in 7/27 females and because of this high mortality rate the top dose group was not included in statistical analysis. Outward signs of toxicity observed in BPA treated animals included rough coat piloerection alopecia pica excess salivation wet urogenital area dyspnea chromodacryorrhea tremors red-stained coat wheezing and vocalization. A statistically significant decrease in mean maternal body weight gain was observed in dams at all dose levels for the treatment period (35-54%) and the gestation period (11-14%). No effect was observed on gravid uterine weights. When maternal body weight gain was corrected for gravid uterine weight a statistically significant decrease was still apparent at all dose levels (26-34%). At necropsy no effect was observed on mean relative liver weight in dams. Pregnancy rates were not affected by treatment with BPA nor was there any effect on the number of implantation sites per litter % resorptions per litter number of live fetuses per litter sex ratio mean
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Morrissey R.E. George J.D. Price C.J. Tyl R.W. Marr M.C. and Kimmel C.A. 1987. The developmental toxicity of bisphenol A in rats and mice. Fundam. Appl. Toxicol. 8:571-582. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Duration of Test: 20 days Exposure Period: Days 6 through 15 of gestationControl Group: Concurrent vehicle In the main study two tests were performed and the data from both tests combined. Thus in total groups of 27-29 time-mated CD rats were gavaged with 0 160 320 640 or 1280 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were subjected to routine external visceral and skeletal examination.
Test Substance Purity	Bisphenol A
Type of Exposure	Gavage

Result Group

Component Name	**Value**
Concentration Result Type	NOAEL
Concentration Units	mg/kg bw/day
Concentration Value Description	>
Conclusion	No evidence of developmental toxicity in the rat was evident at exposure levels which are toxic to the mother. A maternal no effect level could not be identified; the LOAEL of 160 mg/kg based on clinical signs of toxicity and a statistically significant decrease (26%) in body weight gain was identified. No fetal effects were seen at the highest dose level evaluated 640 mg/kg.
Dose Remarks	0 160 320 640 or 1280 mg/kg/day
Exposure Period Units	Days
Frequency of Treatment	Daily
Gender	Female
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	No Data
Population	Fetal
Post-Exposure/Depuration Period Units	Days
Program Flag	HPVIS
Reliability	1
Results Remarks	Range-finding study: groups of 8 time-mated CD rats were gavaged with0 500 1000 1500 2000 2500 or 3000 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were examined for gross morphological abnormalities only. Deaths were observed in 1 5 3 and 5 rats at 1 500 2 000 2 500 and 3 000 mg/kg respectively. Clinical signs of toxicity were observed at all doses and included diarrhea lacrimation lethargy rough coat wheezing wet urogenital area arched back dyspnea bloody nose disorientation alopecia piloerection and vaginal bleeding. A statistically significant decrease in maternal body weight gain (24%) was observed at 1000 mg/kg and above during the gestation period and during the treatment period a decrease in maternal body weight was observed at 1500 mg/kg and above. No deaths were observed in the 0 160 320 and 640 mg/kg dose groups. At 1280 mg/kg deaths were observed in 7/27 females and because of this high mortality rate the top dose group was not included in statistical analysis. Outward signs of toxicity observed in BPA treated animals included rough coat piloerection alopecia pica excess salivation wet urogenital area dyspnea chromodacryorrhea tremors red-stained coat wheezing and vocalization. A statistically significant decrease in mean maternal body weight gain was observed in dams at all dose levels for the treatment period (35-54%) and the gestation period (11-14%). No effect was observed on gravid uterine weights. When maternal body weight gain was corrected for gravid uterine weight a statistically significant decrease was still apparent at all dose levels (26-34%). At necropsy no effect was observed on mean relative liver weight in dams. Pregnancy rates were not affected by treatment with BPA nor was there any effect on the number of implantation sites per litter % resorptions per litter number of live fetuses per litter sex ratio mean
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Morrissey R.E. George J.D. Price C.J. Tyl R.W. Marr M.C. and Kimmel C.A. 1987. The developmental toxicity of bisphenol A in rats and mice. Fundam. Appl. Toxicol. 8:571-582. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol

Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Duration of Test: 20 days Exposure Period: Days 6 through 15 of gestationControl Group: Concurrent vehicle In the main study two tests were performed and the data from both tests combined. Thus in total groups of 27-29 time-mated CD rats were gavaged with 0 160 320 640 or 1280 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were subjected to routine external visceral and skeletal examination.
Test Substance Purity	Bisphenol A
Type of Exposure	Gavage

EPA IRIS (Integrated Risk Information System)

Result Group

Component Name	Value
Date of Last Significant Revision	32412
IRIS Summary	*External Link*
Literature Screening Review	Yes
Quick View Report	*External Link*

EPA eDoc from CDAT; health and safety information reported by industry under TSCA Sections 4,5, 8(d), and 8(e).

Result Group

Component Name	Value
Case Number	86930000306
Declassified	N
Submission Type	8D
Submitter	NA-8D-Nov-2011

EPA eDoc from CDAT; health and safety information reported by industry under TSCA Sections 4,5, 8(d), and 8(e).

Result Group

Component Name	Value
URL for submitted health and safety information submitted under TSCA requirements	*External Link*

EPA mid-Atlantic Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDo	0.05
RfDoNote	I = IRIS

EPA Mid-Atlantic Region Protection of Groundwater (screening levels)

Result Group

Component Name	Value
Risk Based soil-to-groundwater screening levels (SSL)	44

EPA Southwest region Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDoNote	I

ESIS ESIS URL

Result Group

Component Name	Value
ESIS URL	*External Link*

List of REACH Allergens

Result Group

Component Name	Value
Allergic Effect	SP = photo-contact sensitizing substance.
Remarks	MAK-list 2005

EC priority list of substances for evaluation of endocrine disruption

Result Group

Component Name	Value
Group	Group I = High exposure concern

EWG Human Toxome Project

Result Group

Component Name	Value
EWG Toxome URL	*External Link*

Health Canada Priority Substance Lists (2006)

Result Group

Component Name	Value
Comment	GPE - Greatest Potential for Exposure
Comment for Maximal List Subgroup	GPE - Greatest Potential for Exposure
Maximal List Subgroup	High - GPE
Status	GPE

Health Canada Priority Substance Lists (2006) (Reproductive Toxicity)

Result Group

Component Name	Value
Reproductive Toxicity	Reproductive Toxin

Health Canada High Health Priorities for Action

Result Group

Component Name	Value
Maximal list subgroup	High - - Greatest Potential for Exposure
Simple Hazard Tool Result for Reproductive Toxicity.	Positive
Status	Greatest Potential for Exposure

ITER TERA Risk Assessments

Result Group

Component Name	Value
ITER TERA URL	*External Link*

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

Minnesota WWTP study in 2009 - bottom sediment samples

Result Group

Component Name	Value
Chemical type and analysis lab	Chemicals analyzed in Bottom Sediment at the USGS National Water Quality Laboratory
Notes for analytical results	<, less than; E, estimated; na, not analyzed; M, present in sample at concentrations less than reporting limits
Possible compound uses or sources	flame retardant, manuf. polycarbonate resins, antioxidant
units	ng/g

Result Group

Component Name	Value
Chemical type and analysis lab	Hormones Analyzed in Bottom Sediment at the USGS National Water Quality Laboratory
Notes for analytical results	<, less than; E, estimated; na, not analyzed; M, present in sample at concentrations less than reporting limits
Possible compound uses or sources	Plastic component
units	ng/g

Minnesota WWTP study in 2009 - water samples

Result Group

Component Name	Value
Chemical type and analysis lab	Chemicals Analyzed in Water at Larry Barber's USGS National Research Program Laboratory
Notes for analytical results	(1) Chemicals with and "E" following the number indicate a compound with low recovery, unstable instrument response, or reference standard prepared from a technical mixture for water analyses (Zaugg and others, 2006).
Possible compound uses or sources	FR, manuf. polycarbonate resins, antioxidant. FR = flame retardant
units	ng/L

Minnesota WWTP study in 2009 - water samples

Result Group

Component Name	Value
Austin WWTP outflow at Austin, Minn.	62
Cedar River above treatment plant at Austin, Minn.	230
Cedar River below treatment plant at Austin, Minn.	23
Center Creek below WWTP at Fairmont, Minn.	180
Center Creek on Co. Rd. 143, at Fairmont, Minn.	58
Chemical type	Alkylphenols in Water
East Grand Forks WWTP Outflow at East Grand Forks, MN	nd
Elbow Creek above Eveleth WWTP at Eveleth, Minn.	nd
Elbow Creek below Eveleth WWTP at Eveleth, Minn.	nd
Ely WWTP outflow at Ely, Minn.	84
Eveleth WWTP outlflow at Eveleth, Minn.	nd
Fairmont WWTP outflow at Fairmont, Minn.	150
Grand Rapids WWTP outflow at Grand Rapids, Minn	38
Grindstone River above WWTP near Hinckley, Minn.	nd
Grindstone River below Hinckley, Minn.	nd
Hinckley WWTP near Hinckley, Minn.	nd
Hutchinson WWTP outflow at Hutchinson, Minn.	65
Industrial WWTP outflow near Worthington, Minn.	nd
Jewitts Creek at U.S. Hwy. 12 in Litchfield, Minn.	nd
Jewitts Creek near Litchfield, Minn.	nd
Lake City WWTP outflow at Lake City, Minn.	50
Lake Superior in St. Louis Bay at Duluth, Minn.	3200
Lester Prairie WWTP outflow at Lester Prairie, Minn.	nd
Litchfield WWTP outflow near Litchfield, Minn.	nd
Luverne WWTP outflow near Luverne, Minn.	30
Lynd WWTP outflow near Lynd, Minn.	33
Marshall WWTP outfall at Marshall, Minn.	nd
Melrose WWTP outflow at Melrose, Minn.	31
Metro Plant (WWTP) outflow in St. Paul, Minn.	nd
Mississippi River (Lake Pepin) above Lake City, Minn.	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd

Mississippi River above WWTP at Grand Rapids, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	80
Mississippi River below WWTP at Grand Rapids, Minn.	nd
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek below WWTP outflow at Worthington, Minn.	34
Pelican Rapids WWTP outflow at Pelican Rapids, Minn.	47
Pelican River above WWTP at Pelican Rapids, Minn.	nd
Pelican River below WWTP at Pelican Rapids, Minn.	nd
Red River of the North above WWTP at East Grand Forks, Minn.	28
Red River of the North below WWTP at East Grand Forks, Minn.	nd
Redwood River above Lynd WWTP near Lynd, Minn.	nd
Redwood River above WWTP below Marshall, Minn.	nd
Redwood River below Lynd WWTP near Lynd, Minn.	nd
Redwood River below WWTP near Marshall, Minn.	25
Rochester WWTP outflow at Rochester, Minn.	30
Rock River above WWTP near Luverne, Minn.	nd
Rock River below WWTP near Luverne, Minn.	nd
Sauk Centre WWTP outflow at Sauk Centre, Minn.	nd
Sauk River above Melrose WWTP at Melrose, Minn.	62
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	nd
Sauk River below Melrose WWTP at Melrose, Minn.	nd
Sauk River below Sauk Center WWTP at Sauk Centre, Minn.	nd
Shagawa Lake at Mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow River above WWTP at Lester Prairie, Minn..	nd
South Fork Crow River below WWTP at Lester Prairie, Minn.	nd
South Fork of the Crow River above WWTP at Hutchinson, Minn.	27
South Fork of the Crow River below Hutchinson, Minn	nd
South Fork Zumbro River at Rochester, Minn.	37
South Fork Zumbro River below WWTP near Rochester, Minn.	nd
Spring Valley Creek above Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley Creek below Spring Valley WWTP outflow at Spring Valley, Minn.	27
Spring Valley WWTP outflow at Spring Valley, Minn.	nd
St. Louis River at Hwy. 23 above Fond Du Lac, Minn.	nd
Tibbets Brook above WWTP outflow at Zimmerman, Minn.	nd
Tibbets Brook below WWTP outflow at Zimmerman, Minn.	91
units	(ng/L)
Western Lake Superior Sanitary District - WWTP at Duluth, Minn.	22000
Williams Creek above WWTP at Williams, Minn.	nd
Williams Creek below WWTP at Williams, Minn.	25
Williams WWTP outflow at Williams, Minn.	nd
Worthington WWTP outflow at Worthington, Minn.	nd
Zimmerman WWTP outflow at Zimmerman, Minn.	170

Result Group

Component Name	**Value**
Austin WWTP outflow at Austin, Minn.	nd
Cedar River above treatment plant at Austin, Minn.	nd
Cedar River below treatment plant at Austin, Minn.	6200
Center Creek below WWTP at Fairmont, Minn.	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type	Hormones in Water
East Grand Forks WWTP Outflow at East Grand Forks, MN	nd
Elbow Creek above Eveleth WWTP at Eveleth, Minn.	nd
Elbow Creek below Eveleth WWTP at Eveleth, Minn.	nd
Ely WWTP outflow at Ely, Minn.	220
Eveleth WWTP outlflow at Eveleth, Minn.	nd
Fairmont WWTP outflow at Fairmont, Minn.	47.5
Grand Rapids WWTP outflow at Grand Rapids, Minn	nd
Grindstone River above WWTP near Hinckley, Minn.	nd
Grindstone River below Hinckley, Minn.	nd
Hinckley WWTP near Hinckley, Minn.	nd
Hutchinson WWTP outflow at Hutchinson, Minn.	nd
Industrial WWTP outflow near Worthington, Minn.	nd
Jewitts Creek at U.S. Hwy. 12 in Litchfield, Minn.	nd
Jewitts Creek near Litchfield, Minn.	nd
Lake City WWTP outflow at Lake City, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	5000
Lester Prairie WWTP outflow at Lester Prairie, Minn.	nd
Litchfield WWTP outflow near Litchfield, Minn.	nd
Luverne WWTP outflow near Luverne, Minn.	nd
Lynd WWTP outflow near Lynd, Minn.	nd
Marshall WWTP outfall at Marshall, Minn.	nd
Melrose WWTP outflow at Melrose, Minn.	nd
Metro Plant (WWTP) outflow in St. Paul, Minn.	nd

Mississippi River (Lake Pepin) above Lake City, Minn.	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	130
Mississippi River below WWTP at Grand Rapids, Minn.	nd
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek below WWTP outflow at Worthington, Minn.	nd
Pelican Rapids WWTP outflow at Pelican Rapids, Minn.	45.52
Pelican River above WWTP at Pelican Rapids, Minn.	nd
Pelican River below WWTP at Pelican Rapids, Minn.	nd
Red River of the North above WWTP at East Grand Forks, Minn.	nd
Red River of the North below WWTP at East Grand Forks, Minn.	nd
Redwood River above Lynd WWTP near Lynd, Minn.	nd
Redwood River above WWTP below Marshall, Minn.	89.68
Redwood River below Lynd WWTP near Lynd, Minn.	nd
Redwood River below WWTP near Marshall, Minn.	nd
Rochester WWTP outflow at Rochester, Minn.	49.7
Rock River above WWTP near Luverne, Minn.	nd
Rock River below WWTP near Luverne, Minn.	nd
Sauk Centre WWTP outflow at Sauk Centre, Minn.	nd
Sauk River above Melrose WWTP at Melrose, Minn.	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	nd
Sauk River below Melrose WWTP at Melrose, Minn.	nd
Sauk River below Sauk Center WWTP at Sauk Centre, Minn.	nd
Shagawa Lake at Mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow River above WWTP at Lester Prairie, Minn..	nd
South Fork Crow River below WWTP at Lester Prairie, Minn.	nd
South Fork of the Crow River above WWTP at Hutchinson, Minn.	nd
South Fork of the Crow River below Hutchinson, Minn	nd
South Fork Zumbro River at Rochester, Minn.	48.78
South Fork Zumbro River below WWTP near Rochester, Minn.	nd
Spring Valley Creek above Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley Creek below Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley WWTP outflow at Spring Valley, Minn.	nd
St. Louis River at Hwy. 23 above Fond Du Lac, Minn.	nd
Tibbets Brook above WWTP outflow at Zimmerman, Minn.	nd
Tibbets Brook below WWTP outflow at Zimmerman, Minn.	200
units	(ng/L)
Western Lake Superior Sanitary District - WWTP at Duluth, Minn.	1200
Williams Creek above WWTP at Williams, Minn.	nd
Williams Creek below WWTP at Williams, Minn.	nd
Williams WWTP outflow at Williams, Minn.	nd
Worthington WWTP outflow at Worthington, Minn.	nd
Zimmerman WWTP outflow at Zimmerman, Minn.	470

Minnesota WWTP study in 2009 - bottom sediment samples

Result Group

Component Name	**Value**
Center Creek Below Wastewater Treatment Plant (WWTP) At Fairmont, MN	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type and analysis lab	Organic Waste Compounds in Sediment
Grindstone River Above Wwtp Near Hinckley, MN	70
Grindstone River below Hinckley, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	310
Metro Plant (Wastewater Treatment Plant (WWTP)) Outflow In St. Paul, MN	90
Mississippi River (Lake Pepin) Above Lake City, MN	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	190
Mississippi River at Industrial Mollasses St. Paul, Minn.	60
Mississippi River at South St. Paul, Minn.	nd
Mississippi River Below Wastewater Treatment Plant (WWTP) At Grand Rapids, MN	40
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek Below Wastewater Treatment Plant (WWTP) Outflow At Worthington,MN	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	80
Sauk River Below Melrose Wastewater Treatment Plant (WWTP) At Melrose, MN	nd
Sauk River Blw Sauk Centre Wastewater Treatment Plant (WWTP) At Sauk Centre, MN	nd
Shagawa Lake at mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow R. Blw Wastewater Treatment Plant (WWTP) At Lester Prairie, MN	110
South Fork Crow River above WWTP at Lester Prairie, Minn.	nd
South Fork Crow River Below Hutchinson, MN	40

South Fork of the Crow River above WWTP at Hutchinson, Minn.	70
St. Louis River at Hwy 23 above Fond Du Lac, Minn.	100
units	(ng/g)

Result Group

Component Name	Value
Center Creek Below Wastewater Treatment Plant (WWTP) At Fairmont, MN	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type and analysis lab	Hormones in Sediment
Grindstone River Above Wwtp Near Hinckley, MN	34.9
Grindstone River below Hinckley, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	213
Metro Plant (Wastewater Treatment Plant (WWTP)) Outflow In St. Paul, MN	54.3
Mississippi River (Lake Pepin) Above Lake City, MN	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	170
Mississippi River at Industrial Mollasses St. Paul, Minn.	14
Mississippi River at South St. Paul, Minn.	14.1
Mississippi River Below Wastewater Treatment Plant (WWTP) At Grand Rapids, MN	50.9
Okabena Creek above WWTP outflow at Worthington, Minn.	11.8
Okabena Creek Below Wastewater Treatment Plant (WWTP) Outflow At Worthington,MN	nd
Sauk River above Melrose WWTP at Melrose, Minn.	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	73.900000000000006
Sauk River Below Melrose Wastewater Treatment Plant (WWTP) At Melrose, MN	nd
Sauk River Blw Sauk Centre Wastewater Treatment Plant (WWTP) At Sauk Centre, MN	25.4
Shagawa Lake at mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow R. Blw Wastewater Treatment Plant (WWTP) At Lester Prairie, MN	67.900000000000006
South Fork Crow River above WWTP at Lester Prairie, Minn.	17.399999999999999
South Fork Crow River Below Hutchinson, MN	154
South Fork of the Crow River above WWTP at Hutchinson, Minn.	nd
St. Louis River at Hwy 23 above Fond Du Lac, Minn.	158
units	(ng/g)

NOAA

Result Group

Component Name	Value
Concentration	164 days
Duration	1 - 1,280 g/L
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Fathead minnows
Fish Species	(Pimphales promelas)
GD	-
GSI	-
Method of Exposure	whole fish (water)
Reference	Sohoni et al., 2001
Sex	male
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	12 days
Duration	10 - 500 g/L
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Method of Exposure	whole fish (water)
Reference	Lindholst et al., 2000
Sex	juvenile
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	18 days
Duration	50 mg/kg
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Method of Exposure	whole fish (intraperitoneal inj.)
Reference	Christiansen et al., 2000
Sex	juvenile
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	48 hours
Duration	1-10 M
Experiment type	In vitro (fish hepatocyte) effects of endocrine disrupting compounds.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Reference	Sumpter and Jobling, 1995
Use/Source	Monomer of polycarbonate
Vtg production	0.2 - 1.7 ug/ml (approx.)
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	48 hours
Duration	1-10 M
Experiment type	In vitro (fish hepatocyte) effects of endocrine disrupting compounds.
Fish Species	Atlantic salmon
Fish Species	(Salmo salar)
Reference	Celius et al. , 1999
Use/Source	Monomer of polycarbonate
Vtg production	Absorbence units; >controls
Vtg, vitellogenin	+

NTP Developmental Toxicity Abstracts

Result Group

Component Name	Value
Mouse DevTox URL 1	*External Link*
Rat DevTox URL 1	*External Link*

NTP Reproductive Toxicity Abstracts

Result Group

Component Name	Value
ReproTox URL 1	*External Link*
ReproTox URL 2	*External Link*

NTP Long Term Toxicology / Carcinogenicity Study Abstracts and Reports

Result Group

Component Name	Value
Abstract URL	*External Link*
Full Report URL	*External Link*

NTP Center for the Evaluation of Risks to Human Reproduction (CERHR)

Result Group

Component Name	Value
CERHR URL	*External Link*

NTP OHAT Evaluation of Risks to Human Reproduction (CERHR)

Result Group

Component Name	Value
Complete list of evaluation documents URL	*External Link*
NTP Monograph	NTP Monograph, September 2008

OSHA Chemical Sampling Information

Result Group

Component Name	Value
Chemical URLs	*External Link*

Pennsylvania DEP Toxicological Properties for Regulated Substances

Result Group

Component Name	Value
Source for RfDo	I = Integrated Risk Information System (IRIS)

Chemical and Physical properties from Risk Assessment Information System (RAIS)

Result Group

Component Name	Value
Absorption Factor, Dermal	1.00E-01
Beef Transfer Coeff.	5.22E-05
Density	-
Diffusivity in Air	5.09E-02
Diffusivity in Water	5.94E-06
Fish Bioacc. Factor	4.38E+01
GI Absorption Factor	1.00E+00
Log of Octanol-Water Partition Coef.	3.32E+00
Melting Point	1.53E+02
Milk Transfer Coeff.	1.65E-05
Molecular Weight	2.28E+02
Organic Carbon Partition Coef.	3.77E+04
Reference for Beef Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Boiling Point	LANGE

Reference for Diffusivity in Air	WATER9 (U.S. EPA, 2001)
Reference for Diffusivity in Water	WATER9 (U.S. EPA, 2001)
Reference for Fish Bioacc. Factor	EPI
Reference for Log of Octanol-Water Partition Coef.	EPI
Reference for Melting Point	EPI
Reference for Milk Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Molecular Weight	EPI
Reference for Organic Carbon Partition Coef.	EPI
Reference for Skin Permeability Constant	EPI
Reference for Soil-to-Dry Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Soil-to-Wet Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Unitless Henry's Law Constant	EPI
Reference for Vapor Pressure	EPI
Reference for Water Solubility	EPI
Skin Permeability Constant	1.32E-02
Soil-Water Partition Coef.	-
Unitless Henry's Law Constant	3.74E-10
Vapor Pressure	2.27E-07
Water Solubility	1.20E+02

Scorecard URLs

Result Group

Component Name	Value
Scorecard URL	*External Link*

Result Group

Component Name	Value
Scorecard URL	*External Link*

Result Group

Component Name	Value
Scorecard URL	*External Link*

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Component Name	Value
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Component Name	Value
Scorecard URL	*External Link*

Result Group

Component Name	Value
Scorecard URL	*External Link*

Scorecard Health Effects Summaries

Result Group

Component Name	Value
Health Impact Type	Suspected Cardiovascular or Blood Toxicity Hazard
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Endocrine Toxicants
References. See source for complete citations http://www.scorecard.org/health-effects/	BKH, GUIL, IL-EPA, JNIHS, KEIT, RTECS, WWF

Result Group

Component Name	Value
Health Impact Type	Suspected Gastrointestinal Or Liver Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Immunotoxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	HAZMAP

Result Group

Component Name	Value
Health Impact Type	Suspected Kidney Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Neurotoxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Reproductive Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	JANK, NTP-R

Result Group

Component Name	Value
Health Impact Type	Suspected Skin Or Sense Organ Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	HAZMAP, KLAA

Toxipedia Chemicals List and Factsheets. Toxipedia is a project of the Institute of Neurotoxicology and Neurological Disorders.

Result Group

Component Name	Value
Toxipedia Chemicals URL	*External Link*

NLM TOXNET DART

Result Group

Component Name	Value
TOXNET DART URL	*External Link*

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

NLM TOXNET HSDB Hazard Information

Result Group

Component Name	Value
FPOT - FIRE POTENTIAL	Combustible[Sax, N.I. and R.J. Lewis, Sr. (eds.). Hawleys Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987., p. 154] **PEER REVIEWED**

Result Group

Component Name	Value
FLPT - FLASH POINT	415 deg F (Open cup)[U.S. Coast Guard, Department of Transportation. CHRIS - Hazardous Chemical Data. Volume II. Washington, D.C.: U.S. Government Printing Office, 1984-5.] **PEER REVIEWED**

Result Group

Component Name	Value
FIRP - FIRE FIGHTING PROCEDURES	Foam, dry chemical, carbon dioxide.[U.S. Coast Guard, Department of Transportation. CHRIS - Hazardous Chemical Data. Volume II. Washington, D.C.: U.S. Government Printing Office, 1984-5.] **PEER REVIEWED**

Result Group

Component Name	Value
REAC - REACTIVITIES & INCOMPATIBILITIES	Strong oxidizers, strong bases, acid chlorides, and acid anhydrides.[Sittig, M. Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2002. 4th ed.Vol 1 A-H Norwich, NY: Noyes Publications, 2002., p. 352] **PEER REVIEWED**

Result Group

Component Name	Value
SERI - SKIN, EYE AND RESPIRATORY IRRITATIONS	Solid irritating to skin & eyes. ... Dusts irritating to upper respiratory passages ... .[U.S. Coast Guard, Department of Transportation. CHRIS - Hazardous Chemical Data. Volume II. Washington, D.C.: U.S. Government Printing Office, 1984-5.] **PEER REVIEWED**

Result Group

Component Name	Value
EQUP - PROTECTIVE EQUIPMENT & CLOTHING	Wear protective gloves and clothing to prevent any reasonable probability of skin contact. Safety equipment suppliers/manufacturers can provide recommendations on the most protective glove/clothing material for your operation. All protective clothing (suits, gloves, footwear, headgear) should be clean, available for work each day, and put on before work. Contact lenses should not be worn when working with this chemical. Wear dust-proof chemical goggles and face shield unless full face-piece respiratory protection is worn. Employees should wash immediately with soap when skin is wet or contaminated. Provide emergency showers and eyewash.[Sittig, M. Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2002. 4th ed.Vol 1 A-H Norwich, NY: Noyes Publications, 2002., p. 352] **PEER REVIEWED**

Result Group

Component Name	Value
EQUP - PROTECTIVE EQUIPMENT & CLOTHING	Approved dust mask and clean, body covering clothing sufficient to prevent excessive or repeated exposure to dust, fumes, or soln. Safety glasses with side shields.[U.S. Coast Guard, Department of Transportation. CHRIS - Hazardous Chemical Data. Volume II. Washington, D.C.: U.S. Government Printing Office, 1984-5.] **PEER REVIEWED**

Result Group

Component Name	Value
OPRM - OTHER PREVENTIVE MEASURES	SRP: The scientific literature for the use of contact lenses in industry is conflicting. The benefit or detrimental effects of wearing contact lenses depend not only upon the substance, but also on factors including the form of the substance, characteristics and duration of the exposure, the uses of other eye protection equipment, and the hygiene of the lenses. However, there may be individual substances whose irritating or corrosive properties are such that the wearing of contact lenses would be harmful to the eye. In those specific cases, contact lenses should not be worn. In any event, the usual eye protection equipment should be worn even when contact lenses are in place. **PEER REVIEWED**

Result Group

Component Name	Value
STRG - STORAGE CONDITIONS	Store away from heat and strong oxidizers and ... /strong bases, acid chlorides, and acid anhydrides./[Sittig, M. Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2002. 4th ed.Vol 1 A-H Norwich, NY: Noyes Publications, 2002., p. 352] **PEER REVIEWED**

Result Group

Component Name	Value
CLUP - CLEANUP METHODS	Evacuate and restrict persons not wearing protective equipment from area of spill or leak until cleanup is complete. Remove all ignition sources. Vacuum cleaning is preferable to sweeping to keep dust levels down. Use special HEPA vacuum; not a shop vacuum. Ventilate area of spill or leak after cleanup is complete. It may be necessary to contain and dispose of this chemical as a hazardous waste. If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated waters. Contact your Department of Environmental Protection or your regional office of the federal EPA for specific recommendations. If employees are required to clean up spills, they must be properly trained and equipped. OSHA 1910.120(q) may be applicable.[Sittig, M. Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2002. 4th ed.Vol 1 A-H Norwich, NY: Noyes Publications, 2002., p. 352] **PEER REVIEWED**

Result Group

Component Name	Value
DISP - DISPOSAL METHODS	SRP: The most favorable course of action is to use an alternative chemical product with less inherent propensity for occupational exposure or environmental contamination. Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier. Ultimate disposal of the chemical must consider: the materials impact on air quality; potential migration in soil or water; effects on animal, aquatic, and plant life; and conformance with environmental and public health regulations. **PEER REVIEWED**

Result Group

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds).; Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160] **PEER REVIEWED**

Result Group

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	Basic treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary ... . Monitor for shock and treat if necessary ... . Anticipate seizures and treat if necessary ... . For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport ... . Do not use emetics. For ingestion, rinse mouth and administer 5 mL/kg up to 200 mL of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool ... . Cover skin burns with dry sterile dressings after decontamination ... . /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds).; Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160] **PEER REVIEWED**

Result Group

Component Name	Value
ANTR - ANTIDOTE AND EMERGENCY TREATMENT	Advanced treatment: Consider orotracheal or nasotracheal intubation for airway control in the patient who is unconscious, has severe pulmonary edema, or is in severe respiratory distress. Positive-pressure ventilation techniques with a bag valve mask device may be beneficial. Consider drug therapy for pulmonary edema ... . Consider administering a beta agonist such as albuterol for severe bronchospasm ... . Monitor cardiac rhythm and treat arrhythmias as necessary ... . Start IV administration of D5W /SRP: "To keep open", minimal flow rate/. Use 0.9% saline (NS) or lactated Ringer's if signs of hypovolemia are present. For hypotension with signs of hypovolemia, administer fluid cautiously. Watch for signs of fluid overload ... . Treat seizures with diazepam or lorazepam ... . Use proparacaine hydrochloride to assist eye irrigation ... . /Poisons A and B/[Currance, P.L. Clements, B., Bronstein, A.C. (Eds).; Emergency Care For Hazardous Materials Exposure. 3Rd edition, Elsevier Mosby, St. Louis, MO 2005, p. 160-1] **PEER REVIEWED**

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ Both a 17-year-old woman and 25-year-old man developed dermatitis on the feet that corresponded to the area in contact with the plastic sandals they wore. Patch testing was performed with 30 different potential plastic and glue allergens, but apparently a positive result was seen only with bisphenol-A (1%). Bisphenol-A was demonstrated to be present in the footwear. Again, either free bisphenol-A may have caused these allergic responses or these constitute further cases of cross sensitisation arising consequent to initial sensitisation to bisphenol-A-derived epoxy resins in plastics.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p. 170 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ A single clinical report describes photoallergic contact dermatitis to bisphenol A, with subsequent persistent light reactivity, in a group of eight outdoor workers.[Maguire HC Jr; Acta Derm Venereol (Stockh) 68 (5): 408-12 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ In 13 of 78 cases of epoxy resins sensitized Polish workers positive reactions to 2% aqueous solution of bisphenol A were observed in 24/48-hours covered patch tests.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.95 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ Complaints about eye, nose and throat irritation from workers exposed to Bisphenol A dust at a 8 hr TWA of 5 mg/ cu m.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.95 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value

HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ Allergic contact dermatitis caused by polyvinyl chloride gloves is rarely reported, and in only 2 cases was bisphenol A considered to be the responsible sensitizer. .. patient with occupational hand dermatitis after the use of a new type of high-density vinyl (HDV) gloves /is described/. Patch tests showed positive (++) reactions to both used and new HDV gloves and to bisphenol A. Chemical analysis by gas chromatography-mass spectrometry demonstrated the presence of bisphenol A in the HDV gloves. Replacement by nitrile rubber gloves resulted in complete clearance of the hand dermatitis.[Matthieu L et al; Contact Dermatitis 49 (6): 281-3 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/CASE REPORTS/ ... Four cases of contact allergy from bisphenol A in PVC gloves /are described/. Only the case of the first patient, a packer in the food industry, has been reported in detail. A dentist and an oral hygienist apprentice had used disposable PVC gloves made by the same manufacturer, both in 1999. The dentists PVC gloves contained 0.044% bisphenol A. In 2002, a cabin servant had used 2 brands of household-type PVC gloves. Her gloves contained 0.12% and 0.07% bisphenol A. Moreover, 2 of the patients reacted to p-tertiary butyl catechol, a polymerization inhibitor in PVC, but the connection between the allergic reaction and the PVC gloves could not be proven. In 2002, 16 brands of disposable PVC gloves for medical use /were analyzed/, covering at least 80% of the Finnish market. We found a very small amount of bisphenol A in 1 brand, and no p-tertiary butyl catechol in any of the gloves.[Aalto-Korte K et al; Contact Dermatitis 49 (4): 202-5 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/SURVEILLANCE/ Serum bisphenol A, antiphospholipid antibodies (aPLs), antinuclear antibodies (ANAs), natural killer cell (NK) activity, prolactin, progesterone, thyroid-stimulating hormone (TSH) and free T4 were examined in 45 patients with a history of three or more (3-11) consecutive first-trimester miscarriages and 32 healthy women with no history of live birth and infertility. Subsequent pregnancy outcome and embryonic karyotype of abortuses were examined prospectively. The mean+/-SD values for bisphenol A in patients were 2.59+/-5.23 ng/mL, significantly higher than the 0.77+/-0.38 ng/mL found for control women (P=0.024). High exposure to bisphenol A was associated with the presence of ANAs but not hypothyroidism, hyperprolactinaemia, luteal phase defects, NK cell activity or aPLs. A high level of bisphenol A in itself did not predict subsequent miscarriage. Exposure to bisphenol A is associated with recurrent miscarriage.[Sugiura-Ogasawara M et al; Hum Reprod 20 (8): 2325-9 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/SURVEILLANCE/ ... Bisphenol A (BPA) concentrations /were determined/ in premenopausal women by an enzyme-linked immunosorbent assay and evaluated possible linkage between its contamination levels and endometrial hyperplasia, an estrogen-related disorder of the uterus. ... Serum BPA was detectable in all subjects and its concentrations in healthy controls with normal endometrium were 2.5 +/- 1.5 ng/mL(mean +/- SD). BPA levels in patients with simple endometrial hyperplasia with benign nature were 2.9 +/- 2.0 ng/mL and were not significantly different from the controls. Unexpectedly, BPA levels in patients with complex endometrial hyperplasia with malignant potential were 1.4 +/- 0.4 ng/mL and significantly lower compared to both control and simple endometrial hyperplasia groups. In addition, serum BPA levels in postmenopausal endometrial cancer patient (1.4 +/- 0.5 ng/mL) were also significantly lower than control and simple endometrial hyperplasia groups.[Hiroi H et al; Endocr J 51 (6): 595-600 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/SURVEILLANCE/ This study was performed to investigate the serum levels of bisphenol A (BPA), an endocrine disruptor, in women with ovarian dysfunction and obesity. Fasting serum samples were obtained from 19 non-obese and 7 obese women with normal menstrual cycles: 7 patients with hyperprolactinemia, 21 patients with hypothalamic amenorrhea, and 13 non-obese and 6 obese patients with polycystic ovary syndrome (PCOS). BPA was measured by an enzyme-linked immunosorbent assay. BPA was detected in all human sera. Serum BPA concentrations were significantly higher in both non-obese and obese women with polycystic ovary syndrome (1.05 +/- 0.10 ng/mL, 1.17 +/- 0.16 ng/mL; p<0.05, respectively) and obese normal women (1.04 +/- 0.09 ng/mL, p<0.05) compared with those in non-obese normal women (0.71 +/- 0.09 ng/mL). There was no difference among women with hyperprolactinemia, women with hypothalamic amenorrhea, and non-obese normal women. There were significant positive correlations between serum BPA and total testosterone (r = 0.391, p<0.001), free testosterone (r = 0.504, p<0.001), androstenedione (r = 0.684, p<0.001), and DHEAS (r = 0.514, p<0.001) concentrations in all subjects.[Takeuchi T et al; Endocr J 51 (2): 165-9 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/SURVEILLANCE/ The daily bisphenol A (BPA) intake level of Japanese pregnant women was surveyed based on the measurement of the urinary excretion level of a BPA metabolite. Spot urine samples were collected from 56 pregnant women who visited the gynecology division of a hospital for a routine health check between June and October 2003. The urinary concentrations of the BPA metabolite and creatinine were measured by GC/MS/MS and spectrophotometry, respectively. Daily BPA intake was assumed to be equal to daily excretion. The daily intake of BPA among Japanese pregnant women was estimated to be in the range of < 0.3 to 7.9 ug/day (median < 2.0 ug/day), being consistent with the levels in previous studies for non-pregnant Japanese women. This level was far below the current Acceptable Daily Intake (0.01 mg/kg/day) which was set by the European Commission. The maximum estimated intake per body weight (0.16 ug/kg/day) reached 1/10 of the Lowest Adverse Effect Level of BPA for pregnant mice for a reproductive effect on the offspring (2 ug/kg/day).[Fujimaki K et al; Nippon Eiseigaku Zasshi 59 (4): 403-8 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

HTOX - HUMAN TOXICITY EXCERPTS	/BIOMONITORING/ Bisphenol A (BPA) and phthalate diesters, two well-described endocrine-disrupting substances (EDSs), were shown to elute out of the dialysis tubing used by patients who underwent hemodialysis (HD) and peritoneal dialysis (PD). Since these patients require dialysis for survival, they may be exposed to potentially harmful levels of these compounds. In this study, serum BPA levels were quantified in HD (n = 45) and PD (n = 43) patients, and healthy controls (n = 12) using an enzyme-linked immunosorbent assay (ELISA) kit ... Serum BPA levels were significantly elevated in both HD (5.3 + or - 0.3 ng/mL) and PD (3.8 + or - 0.2 ng/mL) patients compared to controls (2.6 + or - 0.1 ng/mL; P < 0.05); levels in the HD patients were significantly greater than in the PD patients (P < 0.05). To investigate the potential effects of these higher serum BPA levels, the patients serum samples were examined for their effects on estrogen receptor gene transcription levels using a luciferase assay system. MCF-7 cells that were transfected with estrogen response element (ERE) cDNA were cultured with the patients sera or a solution of BPA ... /The/ results showed that ... patients sera induced higher levels of ERE transcription than did the same dose of BPA ...[Kanno Y et al; Ther Apher Dial 11 (4): 262-5 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/BIOMONITORING/ Cross sectional study of 42 workers whose job was to spray epoxy resin hardening agents including bisphenol A diglycidyl ether (BADGE) and mixed organic solvents, and 42 matched control workers without BADGE use in the same machine plants. Concentrations of urinary bisphenol A were higher in the epoxy resin sprayers (median 1.06 micro mol/mol creatinine) compared with the controls (median 0.52 umol/mol creatinine). Urinary metabolite concentrations of organic solvents used were all higher in the epoxy resin workers compared with the controls. Endocrinological examination showed different concentrations of follicle stimulating hormone (FSH) between the epoxy sprayers (median 5.3 mIU/mL) and the controls (median 7.6 mIU/mL). FSH showed a mild correlation with urinary bisphenol A, but not with the metabolites of organic solvents. Luteinising hormone and free testosterone concentrations did not differ between the two groups.[Hanaoka T et al; Occup Environ Med 59 (9): 625-8 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/BIOMONITORING/ In the present study, exposure to the endocrine-disrupting chemical (EDC), bisphenol A (BPA), in 172 Koreans in relation to biomarkers of susceptibility and effect /were assessed/. The subjects completed questionnaires, which documented occupation, education, lifestyle factors, potential sources of BPA-exposure, and the occurrence of self-diagnosed endocrine disorders. None of the subjects were occupationally exposed to BPA; however, urinary levels of conjugated BPA, determined by HPLC/FD, ranged from 0.03-62.4 ug/L (median, 7.86). The frequencies of potential susceptibility biomarkers, the UGT1A6-Arg184Ser and the SULT1A1-Arg213His polymorphisms, were not associated with urinary BPA levels, either as single genes or in combination. Indirect effects of BPA exposure on the susceptibility to mutagens were evaluated by comparing urinary BPA concentrations with N-methyl-N-nitro-N-nitrosoguanidine (MNNG)-induced sister-chromatid exchange (SCE) in lymphocytes cultured from the subjects. BPA exposure showed marginal or significant associations with the SCEs induced by the low doses of MNNG (0-0.4 mM). However, there was no overall association between urinary BPA levels and MNNG-induced frequency at doses ranging from 0.2-0.6 mM. Finally, /the investigators/ did not detect an association between urinary BPA concentration and endocrine-related disorders.[Yang M et al; Environ Mol Mutagen 47 (8): 571-8 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/BIOMONITORING/ To assess human exposure to bisphenol A (BPA) over a 10-year period, BPA concentrations in maternal serum (MS) and amniotic fluid (AF) obtained at early second trimester were determined. ELISA was used to measure BPA in 200 MS/AF pairs in women carrying fetuses with normal karyotypes (Group I) and in 48 pairs with abnormal karyotypes (Group II). In Group I, BPA concentrations in AF (median: 0.26 ng/ml) were lower (P<0.01) than in MS (2.24 ng/mL). Over a 10-year period, yearly BPA concentrations in MS decreased from 5.62 to 0.99 ng/mL (P<0.001). Eight of the Group I AF samples had relatively high concentrations of BPA (2.80-5.62 ng/mL). In Group II, BPA concentrations in AF (0 ng/mL) were lower (P<0.01) than in MS (2.97 ng/mL). MS BPA concentrations in Group II were higher (P<0.01) than in Group I.[Yamada H et al; Reprod Toxicol 16 (6): 735-9 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
HTOX - HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ BPA (bisphenol A or 2,2-bis(4-hydroxy-phenol)propane) and hydroquinone (HQ, 1,4-benzenediol) are present in dental resin materials, and small quantities of these substances may be eluted from the resins. ...BPA and HQ reduced the viable cell number of human promyelocytic leukemia (HL-60), human oral squamous cell carcinoma (HSC-2) and human submandibular gland (HSG) cell lines in a concentration-dependent manner. The cytotoxic activity of HQ, but not of BPA, was significantly reduced by the addition of N-acetyl-L-cysteine (NAC). In biomimetic studies of the prooxidant/antioxidant activity of thiols during oxidation of BPA or HQ, the radical-scavenging activities of mixtures of BPA or HQ and 2-mercapto-1-methylimidazole (MMI, a thiol) were investigated by the induction period method. BPA without MMI showed a higher induction period (antioxidant activity) than did HQ, but BPA with MMI did not cause oxygen uptake. ... BPA induced internucleosomal DNA fragmentation, a biochemical marker of apoptosis, only in HL-60 cells. BPA activated caspase-9 and caspase-3, suggesting induction of apoptosis via caspase activation by the caspase recruitment domain. The cytotoxicity of BPA was 2-fold less than that of HQ, whereas the apoptosis-inducing activity of BPA was 10-fold less than that of HQ.[Terasaka H et al; Anticancer Res 25 (3B): 2241-7 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

HTOX - HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ ...To compare global gene expression in response to bisphenol A (BPA) and estradiol (E2), a variant of the MCF-7 breast cancer cell line stably expressing HA-tagged ERalpha /was used/. Cultures were treated for 3hr with an ethanol vehicle, E2 (1X10-8 M), or BPA (1X10-6 M), followed by isolation of RNA and microarray analysis with the human U95A probe array (Affymetrix, Santa Clara, CA, USA). More than 300 genes were changed 2-fold or more by either or both agents, with roughly half being up-regulated and half down-regulated. A number of growth- and development-related genes, such as HOXC1 and C6, Wnt5A, Frizzled, TGFbeta-2, and STAT inhibitor 2, were found to be affected exclusively by BPA. We used quantitative real-time PCR to verify regulation of the HOXC6 gene, which showed decreased expression of approximately 2.5-fold by BPA.[Singleton DW et al; Environ Res 100 (1): 86-92 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Bisphenol A ... has been reported when tested as 5% solution in dimethylsulfoxide or propylene glycol to cause "severe injury" to eye.[Grant, W.M. Toxicology of the Eye. 3rd ed. Springfield, IL: Charles C. Thomas Publisher, 1986., p. 148] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Slightly irritating to rabbits skin. BPA was used undiluted or as a 10% aqueous suspension and repeatedly applied to the intact or abraded skin of the belly or ear.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.54 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Slightly irritating to the skin of rabbits. Single application (probably 1000 mg/kg) to shaved skin induced hyperemia (lasting for 4 days) and with repeated application skin returned to normal 21 days after the last application.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.56 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Acute toxicity of bisphenol is relatively low. ... At 1-3 hr after ingestion, animals exhibited a certain atony which can go as far as deep sleep. Profuse diarrhea occurs with most rats. Like e-caprolactam, bisphenol has diuretic action. It is almost 5 times that of urea. ... /it also/ has marked estrogenic action.[Lefaux, R. Practical Toxicology of Plastics. Cleveland: CRC Press Inc., 1968., p. 331] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Bisphenol A was not senistizing in the guinea pig maximization test[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.64 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ three rabbits received a single instillation of 0.1 g bisphenol-A into the eye. The eyes were examined 1, 24, 48 and 72 hours after instillation and daily thereafter up to 28 days. Scattered or diffuse areas of corneal opacity, irritation to the iris and conjunctival redness were observed in all animals after 1 hour. Chemosis was observed in one animal from 1 hour until day 6, and in the remaining two animals at 24 hours only. Corneal opacity and irritation to the iris persisted in a single animal to day 28. In the remaining two animals, no effects were observed on the eye by day 14. Whitish deposits, which the author reports were probably pus, were also observed in two animals from 72 hours to day 5 post-instillation. The persistence of corneal opacity and irritation of the iris to the end of the observation period (day 28) indicate that bisphenol-A has the potential to cause serious damage to the eyes.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.166 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ In studies comparing the two commercial grades of bisphenol-A it was reported that instillation of 0.1 g of bisphenol-A (polycarbonate grade) into a rabbits eyes resulted in slight conjunctival irritation, and moderate clouding of the cornea with slight reddening of the iris. No irritation was observed at 7 days post-instillation. When the eye was washed (it was not stated how long after instillation this was) no signs of irritation were observed. The second commercial grade of bisphenol-A similarly produced moderate discomfort, moderate redness and swelling of the conjunctiva, and moderate clouding of the cornea with vascularisation and reddening of the iris in the washed and unwashed eye. It was stated that the washed eye healed within 7 days and the unwashed eye within 20 days postinstillation.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.166 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ ... Three rabbits received a 4-hour application of 500 mg bisphenol-A moistened with water under a semi-occlusive dressing. Skin reactions were noted at 1, 24, 48 and 72 hours after patch removal. No signs of erythema or edema were observed at any of the time-points. Therefore, bisphenol-A was observed to have negligible skin irritation potential in this study.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.165 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ The acute oral toxicity of bisphenol-A has been investigated ... Sprague-Dawley rats (5 per sex per group) received 2,000 or 5,000 mg/kg of bisphenol-A. No deaths occurred at 2,000 mg/kg. At 5,000 mg/kg all the females and 1/5 males died. Clinical signs of toxicity observed at 2,000 and 5,000 mg/kg on the day of dosing included lethargy and prostration. Hunched posture and piloerection were also observed at 5,000 mg/kg after dosing. At necropsy, pale livers and/or haemorrhaging of the GI tract were observed in animals that had died during the study. The LD50 for males and females combined was approximately 5,000 mg/kg, although females appeared generally more sensitive than males.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.163-4 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ Groups of 10 male and 10 female Fischer F344 rats were exposed, whole body, to bisphenol-A dust (polycarbonate grade) at concentrations of 0 or 170 mg/cu m (the highest attainable concentration) for 6 hours. The mass median aerodynamic diameter (MMAD) of the test substance was 3.9 micrometers (um), and the exposure concentration used was the highest attainable by the investigators with the test system used. Half the animals were necropsied on the day following exposure and the rest on day 14. Microscopic examination was limited to the respiratory tract (nasal turbinates, larynx, trachea and lungs) and associated tissues. No deaths occurred and therefore the LC50 value for rats is > 170 mg/cu m. No gross signs of toxicity were observed. At necropsy, “slight” inflammation of the epithelium lining of the anterior portion of the nose and “slight ulceration” of the oronasal duct were reported in 5/5 males and 4/5 females exposed to 170 mg/cu m and sacrificed on day 2. No exposure-related effects were observed in animals necropsied on day 14.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.163 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Acute Exposure/ A BALB/c mouse ear-swelling test consisted of four groups of 6-8 animals, designated photosensitization, skin sensitization, vehicle/radiation control and phototoxicity groups. Mice in the photosensitization, skin sensitization and vehicle/radiation control groups were pre-treated with the immunological adjuvant cyclophosphamide. At induction, animals in the photosensitization and skin sensitization groups received a daily application of 50 ml of a 20% bisphenol-A on the rear shaven flank for 3 consecutive days. The vehicle/radiation group received vehicle only. Following the last application, only animals in the photosensitization and vehicle/radiation group were irradiated with UV-A and then UV-B. Animals in the phototoxicity group were not treated at induction. Animals in the photosensitization, skin sensitization and phototoxicity groups were challenged with 8 mL of a 10% bisphenol-A solution on each ear. The vehicle/radiation group received vehicle only. All animals except those of the skin sensitization group were then irradiated with UV-A and then UV-B. The photosensitization reaction was measured by the increase in ear thickness 24 hours after challenge compared to thickness in the same ear before challenge. A statistically significant increase in mean ear swelling was observed in animals in the photosensitization group when compared to the skin sensitization, vehicle/radiation and phototoxicity control groups. The results demonstrate that the increase in ear thickness is due to photosensitization, and not skin sensitization, phototoxicity or the vehicle under the conditions of photochallenge.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.172 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ /In subacute toxicity studies/ lab examination did not reveal any abnormal symptoms ... /but/ marked reduction in rate of increase in body weight in treated animals, whether male or female /was observed/. ... 1% in food for 8 wk causes marked drop in growth.[Lefaux, R. Practical Toxicology of Plastics. Cleveland: CRC Press Inc., 1968., p. 331] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ ... Socio-sexual and exploratory behavior of Mongolian gerbil females (Meriones unguiculatus), a monogamous rodent, in response to chronic exposure to the estrogenic endocrine disruptor bisphenol A /was examined/. Paired females were daily administered with one of the following treatments: bisphenol A (2 or 20 ug/kg body weight/day); 17alpha-ethynil estradiol (0.04 ug/kg body weight/day 17alphaE); oil (vehicle). Females were treated for 3 weeks after pairing. Starting on day of pairing, social interactions within pairs were daily recorded. Three weeks after pairing, females were individually tested in a free exploratory paradigm. Bisphenol A and 17alphaE affected male-female social interactions by increasing social investigation. Bisphenol A reduced several exploratory parameters, indicating a decreased exploratory propensity of females. These results highlight the sensitivity of adult female gerbils to bisphenol A during the hormonally sensitive period of pair formation, also considering that the bisphenol A doses tested are well below the suggested human tolerable daily intake.[Razzoli M et al; Brain Res Bull 65 (3): 249-54 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ In a 90-day study, Fischer 344 rats (30 per sex per dose) were exposed whole-body to 0, 10, 50 or 150 mg/cu m bisphenol-A dust for 6 hours/day, 5 days/week for 13 weeks. ... Ten animals per sex per exposure were sacrificed 1 day, 4 weeks and 12 weeks after the final exposure. Routine hematology and biochemical investigations were conducted. Animals at 0 and 150 mg/cu m sacrificed 1 day after the final exposure were subject to a full necropsy (including reproductive organs). For all other animals at all exposure levels a limited number of tissues were analysed, which included the nasal tissues and any visible lesions. No treatment-related deaths were observed. During the 13-week exposure period, a very slight to moderate amount of reddish staining was observed around the nose of animals at 50 mg/cu m and above. Very slight perineal soiling was also observed in almost all animals at 50 mg/cu m and above. This was also evident in 2/10 females at 10 mg/cu m. At the end of the exposure period at 150 mg/cu m, mean body weight gain was reduced by 5% in males and 11% in females. Absolute liver and kidney weights were also decreased in females at 150 mg/cu m by 8% and 10%, respectively. There were no significant bodyweight or organ weight changes at 10 or 50 mg/cu m. No treatment-related differences in hematology or clinical chemistry were observed. At necropsy, increased cecal size, due to distension of the cecum with food, was observed in all animals at 50 and 150 mg/cu m. Very slight to slight hyperplasia and slight to “subchronic” inflammation of the anterior portion of the nasal cavity were observed in all animals at 50 and 150 mg/cu m. Slight decreases (6%) in body weight gain, increased cecal size in 5/10 males and very slight nasal epithelium hyperplasia and inflammation were seen in animals at 150 mg/cu m in the 4 week recovery group. No effects were observed at 10 or 50 mg/cu m in the 4-week recovery group. No changes related to bisphenol-A were detected in any of the 12-week recovery groups. No effects on reproductive organs were seen in any group. ... The NOAEL for this study is 10 mg/cu m, with minimal inflammation of the anterior nasal cavity epithelium being produced at 50 and 150 mg/cu m. There was no evidence of toxicity at any site other than the upper respiratory tract.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.175 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Sherman rats were given 0.003, 0.012, 0.05, 0.2, or 0.8 % bisphenol A or vehicle control for 90 days by oral feed. The highest dose administered (0.8%=520 mg/kg/day) produced no adverse effects.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.69 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ ... The aim of the present study was to investigate if bisphenol A induces oxidative stress in the liver of rats and if co-administration of vitamin C, an antioxidant, can prevent oxidative stress. Bisphenol A (0.2, 2.0 and 20 ug/kg body weight per day) and bisphenol A+vitamin C (0.2, 2.0, 20 ug+40 mg/kg body weight per day) was orally administered to rats for 30 days. After 24 hr of the last treatment, rats were killed using overdose of anesthetic ether. Body weights of the animals and the weights of liver showed no significant changes. The activities of antioxidant enzymes, superoxide dismutase, catalase, glutathione reductase and glutathione peroxidase were decreased in mitochondrial and microsome-rich fractions of liver. The levels of hydrogen peroxide and lipid peroxidation increased in the treated rats when compared with the corresponding group of control animals. Activity of alanine transaminase, a marker enzyme of hepatic injury remained unchanged in the treated rats as compared with the corresponding control rats. Co-administration of bisphenol A and vitamin C showed no changes in the activities of superoxide dismutase, catalase, glutathione reductase and glutathione peroxidase and in the levels of hydrogen peroxide and lipid peroxidation as compared with the corresponding control groups.[Bindhumol V et al; Toxicology 188 (2-3): 117-24 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ Exposure of the fetus to excess estrogen is believed to increase the risk of developing breast cancer during adult life. Fetal exposure to low doses of the xenoestrogen bisphenol A resulted in long-lasting effects in the mouse mammary gland that were manifested during adult life. It enhanced sensitivity to estradiol, decreased apoptosis, increased the number of progesterone receptor-positive epithelial cells at puberty and increased lateral branching at 4 months of age. ... fetal exposure to 2.5, 25, 250 and 1000 ug bisphenol A/kg body weight/day induces the development of ductal hyperplasias and carcinoma in situ at postnatal day 50 and 95 in rats. These highly proliferative lesions have an increased number of estrogen receptor-alpha positive cells. Thus, fetal bisphenol A exposure is sufficient to induce the development of preneoplastic and neoplastic lesions in the mammary gland in the absence of any additional treatment aimed at increasing tumor development.[Murray TJ et al; Reprod Toxicol 23 (3): 383-90 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ Prostatic adenocarcinomas depend on androgen for growth and survival. First line treatment of disseminated disease exploits this dependence by specifically targeting androgen receptor function. Clinical evidence has shown that androgen receptor is reactivated in recurrent tumors despite the continuance of androgen deprivation therapy. ... the effect of bisphenol A (BPA) on the therapeutic response in a xenograft model system of prostate cancer containing the endogenous BPA-responsive AR-T877A mutant protein /was examined/. It is shown that after androgen deprivation, BPA enhanced both cellular proliferation rates and tumor growth. These effects were mediated, at least in part, through androgen receptor activity, as prostate-specific antigen levels rose with accelerated kinetics in BPA-exposed animals. Thus, at levels relevant to human exposure, BPA can modulate tumor cell growth and advance biochemical recurrence in tumors expressing the AR-T877A mutation.[Wetherill YB et al; Mol Cancer Ther 5 (12): 3181-90 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ The aim of the present work was to examine whether in utero exposure to BPA alters mammary gland development and increases its susceptibility to the carcinogen N-nitroso-N-methylurea (NMU). Pregnant Wistar rats were exposed to BPA (25 pg/kg body weight per day) or to vehicle. Female offspring were sacrificed on postnatal day (PND) 30, 50, 110, or 180. On PND50 a group of rats received a single subcarcinogenic dose of NMU (25 mg/kg) and they were sacrificed on either PND110 or PND180. At puberty, animals exposed prenatally to BPA showed an increased proliferation/apoptosis ratio in both the epithelial and stromal compartments. During adulthood (PND110 and PND180), BPA-exposed animals showed an increased number of hyperplastic ducts and augmented stromal nuclear density. Moreover, the stroma associated with hyperplastic ducts showed signs of desmoplasia and contained an increased number of mast cells, suggesting a heightened risk of neoplastic transformation. Administration of a subcarcinogenic dose of NMU to animals exposed prenatally to BPA increased the percentage of hyperplastic ducts and induced the development of neoplastic lesions. The results demonstrate that the prenatal exposure to low doses of BPA perturbs mammary gland histoarchitecture and increases the carcinogenic susceptibility to a chemical challenge administered 50 days after the end of BPA exposure.[Durando M et al; Environ Health Perpsect 115 (1): 80-6 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ Bisphenol-A (BP-A; 4,4-isopropylidenediphenol) is a monomer of plastics commonly used in various consumer products, and is used as an intermediate in the manufacture of epoxy, polycarbonate, and polyester-styrene resins. A National Toxicology Program carcinogenesis bioassay of BP-A (>98% pure) was conducted by feeding diets containing 0, 1000, or 2000 ppm BP-A to groups of 50 male and 50 female Fischer (F)344 rats; 0, 1000, or 5000 ppm to groups of 50 male B6C3F1 mice; and 0, 5000, or 10,000 ppm to groups of 50 female B6C3F1 mice for 103 weeks. The mean body weights of the low- and high-dose rats and of female mice and high-dose male mice were lower than those of the controls throughout much of the study. Lower body weight gains in rats were likely caused by reduced food consumption. Survivals were comparable among groups. Regarding neoplasia, leukemias occurred at increased incidences in BP-A-dosed rats of both sexes: male, 13/50 controls vs 12/50 low-dose and 23/50 high-dose (P < 0.03); in females, the respective findings were 7/50, 13/50, and 12/50. Interstitial-cell tumors of the testes were increased in BP-A-dosed male rats: 35/49 controls vs 48/50 (P < 0.01) and 46/49 (P < 0.01); and an increasing trend was observed for mammary gland fibroadenomas in male rats (P < 0.05, 0/50 controls vs 0/50 and 4/50). In male mice, lymphomas/leukemias were increased: 2/49 controls vs 9/50 (P < 0.05) and 5/50. Multinucleated giant hepatocytes were observed in male mice (1/49 controls vs 41/49 and 41/50), whereas there was no increase of liver tumors. In their BP-A bioassay report, the National Toxicology Program concluded that there was no convincing evidence that BP-A was carcinogenic for rats or mice. However, the marginal increases in leukemias in male and female rats, along with increases in the combined incidence of lymphomas and leukemias in male mice, suggest that BP-A may be associated with increased cancers of the hematopoietic system. Increases in interstitial-cell tumors of the testes in rats were also evidence of carcinogenesis, as was the unusual occurrence of mammary gland fibroadenomas in male rats.[Huff J; Odontology 89 (1): 12-20 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Reproduction and fertility assessment in CD-1 mice administered Bisphenol A. Continuous exposure to Bisphenol A for 2 wk via sc Silastic implants containing 0-100 mg Bisphenol A during dose range finding study caused no overt toxicity, but did seem to increase the weight of the reproductive tract in high dose females.[Bisphenol A: Reproduction and Fertility Assessment in CD-1 Mice When Administered Via Subcutaneous Silastic Implants. Report: 192 pp. (1984) ISS NTP-84-015;NTIS Order No PB84-155308] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Bisphenol A was evaluated for developmental toxicity in CD rats (0, 160, 320, or 640 mg/kg/day) and CD-1 mice (0, 500, 750, 1000, or 1250 mg/kg/day) dosed daily by gastric intubation on gestational days 6 through 15. Timed-pregnant dams were sacrificed 1 day prior to parturition, the uterine contents were examined, and all fetuses were examined for external, visceral, and skeletal malformations. In rats, maternal weight gain during gestation, weight gain corrected for gravid uterine weight, and weight gain during treatment were significantly reduced at all bisphenol A doses. Gravid uterine weight and average fetal body weight per litter were not affected by bisphenol A. No increase in percentage resorptions per litter or percentage fetuses malformed per litter was detected. In mice, maternal mortality occurred at all bisphenol A doses, reaching 18% at the high dose, which also produced a significant decrease in maternal body weight gain during gestation and treatment. Weight gain corrected for gravid uterine weight was not affected by bisphenol A. Reductions in gravid uterine weight and average fetal body weight were observed with the 1250 mg/kg dose of bisphenol A. Relative maternal liver weight was increased at all doses of bisphenol A. There was a significant increase in the percentage of resorptions per litter with 1250 mg bisphenol A/kg/day. Bisphenol A treatment at maternally toxic dose levels during organogenesis produced fetal toxicity in mice but not in rats and did not alter fetal morphologic development in either species.[Morrissey RE et al; Fund Appl Toxicol 8 (4): 571-82 (1987)] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Anatomical evidence of alterations in brain sexual differentiation were examined in male and female offspring born to mouse dams exposed to 0, 25, or 250 ng bisphenol A (BPA)/kg body weight per day from the evening of d 8 of gestation through d 16 of lactation. These studies examined the sexually dimorphic population of tyrosine hydroxylase (TH) neurons in the rostral periventricular preoptic area, an important brain region for estrous cyclicity and estrogen-positive feedback. The significant sex differences in TH neuron number observed in control offspring were diminished or obliterated in offspring exposed to BPA primarily because of a decline in TH neuron number in BPA-exposed females. As a functional endpoint of BPA action on brain sexual differentiation, ... the effects of perinatal BPA exposure on sexually dimorphic behaviors in the open field /were examined/. Data from these studies revealed significant sex differences in the vehicle-exposed offspring that were not observed in the BPA-exposed offspring.[Rubin BS et al; Endocrinology 147 (8): 3681-91 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The aim of this study was to examine fetal mammary gland development at embryonic day (E)18 and assess changes in the tissue organization and histoarchitecture after exposure to an environmentally relevant dose of bisphenol A (BPA). In unexposed fetuses, the relative position of the fetus with respect to its female and male siblings in the uterus influenced growth of the ductal tree, which was more developed in females placed between two males than in females placed between two females. Exposure of dams to 250 ng BPA per kilogram body weight per day from E8 to E18 significantly increased ductal area and ductal extension in exposed fetuses and obliterated positional differences. In the stroma, BPA exposure promoted maturation of the fat pad and altered the localization of collagen. Within the epithelium, BPA exposure led to a decrease in cell size and delayed lumen formation. Because mammary gland development is dependent on reciprocal interactions between these compartments, the advanced maturation of the fat pad and changes in the extracellular matrix may be responsible for the altered growth, cell size, and lumen formation observed in the epithelium.[Vandenberg LN et al; Endocrinology 148 (1): 116-27 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... Bisphenol A (BPA) /was administered/ during the period of implantation to determine levels of exposure required to terminate pregnancy in mice. Varied doses were given through either injection or ingestion. Subcutaneous injections during days 1-4 of gestation significantly reduced litter size at 3.375 mg/day and substantially reduced the proportion of females that were parturient at 10.125 mg/day. Uterine implantation sites were also significantly reduced in females sacrificed at day 6 after receiving 10.125 mg/day. Exposure to lower doses was without significant effect. When inseminated females diets were supplemented on days 1-5 with peanut butter contaminated by 0.11-9.0% BPA, litter size and percent parturient were not affected. However, when the animals diet was exclusively comprised of a mixture of BPA, peanut butter, and powdered chow during days 1-4, an average daily intake of 68.84 mg BPA terminated all pregnancies. No significant effects at lower doses of BPA were seen in number of births or other measures through either mode of administration.[Berger RG et al; Reprod Toxicol 23 (2): 138-44 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The effects of fetal and neonatal exposure to bisphenol A (BPA) on the brain development of mice /was investigated/. The density of tyrosine hydroxylase (TH)-immunoreactive (IR) neurons in substantia nigra was significantly decreased in BPA-exposed female mice (3 microg/g powder food), but not in the male mice, as compared with that of the control mice. The densities of calbindin D-28 K-, calretinin- and parvalbumin-IR neurons in the cerebral cortex were not different between BPA-exposed and the control mice. The present study indicates that chronic exposure of BPA during prenatal and neonatal periods causes a decrease of TH-positive neurons in substantia nigra only in female mice brain.[Tando S et al; Brain Dev 29 (6): 352-6 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The effects of neonatal exposure to low versus high doses of Bisphenol A (BPA) over the control of estrogen receptor alpha (ERalpha) expression in the preoptic area (POA) of prepubertal female rats /were examined/. Pups received sc injections every 48 hr of BPA (high dose, 20 mg/kg and low dose, 0.05 mg/kg) or diethylstilbestrol (DES, 0.02 mg/kg) from postnatal day (PND) 1 to PND7 and were killed at PND8 or PND21. Relative expression of ERalpha transcripts containing alternative 5-untranslated regions OS, ON, O, OT, and E1 in POA were evaluated by RT-PCR. Methylation status of ERalpha promoters was determined by bisulfited DNA restriction analysis and ERalpha protein by immunohistochemistry. In PND8, the high dose of BPA and DES diminished total ERalpha mRNA levels, mediated by the decreased expression of ERalpha-O and ERalpha-OT variants. In contrast, the low dose of BPA augmented total ERalpha mRNA by increasing the expression of the ERalpha-E1 variant. In PND21, both BPA doses increased total ERalpha mRNA by means of the augmented expression of ERalpha-O and ERalpha-OT variants. In PND21, the methylation status of the ERalpha promoters and the circulating levels of estradiol were similar in all experimental groups. At PND8 and PND21, DES and the high dose of BPA decreased, while the low dose of BPA increased ERalpha protein in the POA. ...[Monje L et al; J Endocrinol 94 (1): 201-12 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The hypothesis of fetal origins of adult disease posits that early developmental exposures involve epigenetic modifications, such as DNA methylation, that influence adult disease susceptibility. In utero or neonatal exposure to bisphenol A (BPA), a high-production-volume chemical used in the manufacture of polycarbonate plastic, is associated with higher body weight, increased breast and prostate cancer, and altered reproductive function. This study shows that maternal exposure to this endocrine-active compound shifted the coat color distribution of viable yellow agouti (Avy) mouse offspring toward yellow by decreasing CpG (cytosine-guanine dinucleotide) methylation in an intracisternal A particle retrotransposon upstream of the Agouti gene. CpG methylation also was decreased at another metastable locus, the CDK5 activator-binding protein (CabpIAP). DNA methylation at the Avy locus was similar in tissues from the three germ layers, providing evidence that epigenetic patterning during early stem cell development is sensitive to BPA exposure. Moreover, maternal dietary supplementation, with either methyl donors like folic acid or the phytoestrogen genistein, negated the DNA hypomethylating effect of BPA.[Dolinoy DC et al; Proc Natl Acad Sci USA 104 (32): 13056-61 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ...Since concern has been mounting regarding the human health and environmental effects of bisphenol A (BPA), a high-production-volume chemical with estrogenic activity used in the synthesis of plastics, ... its long-term effects /were investigated/ in an experimental animal model that was previously shown useful in studying the adverse effects of developmental exposure to DES. Outbred female CD-1 mice were treated on days 1-5 with subcutaneous injections of BPA (10, 100 or 1000 ug/kg/day) dissolved in corn oil or corn oil alone (Control). At 18 months, ovaries and reproductive tract tissues were examined. There was a statistically significant increase in cystic ovaries and cystic endometrial hyperplasia (CEH) in the BPA-100 group as compared to Controls. Progressive proliferative lesion (PPL) of the oviduct and cystic mesonephric (Wolffian) duct remnants were also seen in all of the BPA groups. More severe pathologies of the uterus following neonatal BPA treatment included adenomyosis, leiomyomas, atypical hyperplasia, and stromal polyps.[Newbold RR et al; Reprod Toxicol 24 (2): 253-8 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Calbindin-D9k (CaBP-9k) ... can be evaluated as an early gene marker for assaying estrogenic effects of putative environmental chemicals in the rat uterus. This study was undertaken to investigate CaBP-9k mRNA and protein expression in the postnatal rat uterus following maternal exposure to 17beta-estradiol (E2) and bisphenol A (BPA) during the neonatal period. Treatment with a high dose of BPA (600 mg/kg body weight (BW) per day) resulted in a 3-fold increase in CaBP-9k mRNA expression for 3 days, while a single dose of E2 (40 ug/kg BW per day) induced 2-fold increase of this gene in the maternal uterus. In an agreement with maternal CaBP-9k mRNA, postnatal CaBP-9k mRNA in the uterus increased 4-fold when treated with BPA (600 mg/kg BW per day). In addition, treatment with increasing concentrations of BPA resulted in significant increases in CaBP-9k protein in the maternal rat uterus. It is of interest that increasing doses of BPA induced a significant ERalpha mRNA increase in the postnatal uterus. Furthermore, immunohistochemistry revealed that treatment with BPA induced CaBP-9k protein in the maternal uterus. We demonstrated that maternal exposure to BPA during late pregnancy induced CaBP-9k mRNA and protein in maternal and postnatal rat uteri.[Hong EJ et al; J Reprod Dev 51 (4): 499-508 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ In the present study, the effects of /bisphenol A/ proved to be preferentially directed toward hypothalamic and extrahypothalamic somatostatin receptor subtype 3, which displayed a higher binding affinity of its specific nonpeptide agonist L-796-778 than that of L-779-976 (subtype 2). One type of action, with respect to animals treated with vehicle alone, consisted of a very strong (p < 0.001) decrease of somatostatin receptor subtype 3 mRNA levels in layer V of the frontoparietal cortex of adult rats (Sprague-Dawley) after transplacental and lactational exposure to bisphenol A (400 ug/kg/day). Similarly, such treatment in 7-day-old rats was responsible for a very strong reduction of the subtype 3 mRNA levels in the hypothalamic periventricular nuclei and a strong (p < 0.01) increase of the subtype 3 mRNA levels in the ventromedial nuclei. Moreover, even greater upregulated and downregulated activities were reported when subtype 3 mRNA levels were determined in the presence of receptor agonists specific for distinct alpha GABA(A) receptor subunits (alpha(1,5)). The predominant effects of bisphenol A on somatostatin receptor subtype 3 mRNA levels occurring in an alpha GABA(A) subunit-dependent manner tend to suggest the early modulatory importance of this environmental disruptor on cross-talking mechanisms that are implicated in the plasticity of neural circuits, with consequential influence on neuroendocrine/sociosexual behaviors.[Facciolo RM et al; Toxicol Sci 88 (2): 4777-84 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ In this study, /the investigators/ examined whether in utero and lactational exposure to bisphenol A (BPA) alters thyroid status in rat F1 offspring. Dams were orally administered various doses of BPA (0, 4 or 40 mg/kg body weight per day) from gestation day (GD) 6 through postnatal day (PND) 20. The BPA and control groups did not differ significantly with respect to plasma thyroxine (T4) concentration. The thyroid glands from the BPA groups had normal T4 responses to exogenous thyroid-stimulating hormone in vivo. These results suggest that in utero and lactational exposure (indirect exposure) to BPA (4-40 mg/kg/day, GD 6 - PND 20) does not affect thyroid functions in the F1 generation of male and female rats.[Kobayashi K et al; Ind Health 43 (4): 685-90 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ In this study, the effects of prenatal exposure to BPA (0.1 ppm in drinking water applied to dams during the final week of pregnant) on emotional and learning behaviors in addition to exploratory behavior /were assessed/. Estimated daily intake was 15 ug/kg/day, below the reference dose (RfD) in the United States and the daily tolerable intake (TDI) in Japan (50 ug/kg/day). The rats were successively tested in open-field test, elevated plus maze test, passive avoidance test and forced swimming test during development from 6 to 9 weeks of juvenile period. Prenatal exposure to BPA mainly affected male rats and abolished sex differences in rearing behavior in the open-field test and struggling behavior in the forced swimming test. BPA increased the immobility of male rats in the forced swimming test. The avoidance learning and behaviors in the elevated plus maze were not affected. The present study demonstrates that male rats at the final week of prenatal period are sensitive to BPA, which impairs sexual differentiation in rearing and struggling behavior and facilitate depression-like behavior.[Fujimoto T et al; Brain Res 1068 (1): 49-55 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The effect of bisphenol-A on fertility was evaluated in an extensive oral two generation reproduction toxicity study in Crj;CD (SD) IGS rats. The F0 generation consisted of groups of 25 rats per sex per group administered 0, 0.2, 2, 20 and 200 ug/kg/day bisphenol-A by gavage during a premating period of 10 weeks for males and 2 weeks for females and a 2-week mating period. Males and females from each group were randomly paired and co-habited for 2 weeks. Females were also administered the test material during gestation and lactation. F0 males and females were sacrificed after the mating period and weaning of F1 pups, respectively. Twenty-five male and female F1 generation offspring from each group were retained after weaning for assessment of their reproductive capacity. F1 animals were administered bisphenol-A for a 10-week premating period and a 3-week mating period (see below). Again, females received the test material during gestation and lactation, and male and female parental animals were sacrificed at the same times used for the F0 generation. Twenty-five male and female F2 generation offspring from each group were retained after weaning for assessment of sexual maturation. Males and females were administered the test material until they were sacrificed at the age of 7 and 14 weeks, respectively. ...In parental animals, no clinical signs of toxicity, nor any effects on body weight gain, food intake or treatment-related deaths were observed in any generation. No effect on behavior (i.e. performance in learning tests) was observed in F1 animals. Estrus cycle, fertility index and the number of implantations in F0 and F1 females were not affected by treatment with bisphenol-A. No significant differences were observed between bisphenol-A and control animals for the time to preputial separation or vaginal opening. Compared to controls, a statistically significant decrease (<5%) in anogenital distance (AGD) was seen in F1 males at 0.2, 20 and 200 ug/kg/day, F1 females at 20 and 200 ug/kg/day and F2 males and females at 20 and 200 ug/kg/day. These decreases were not statistically significant when the ratio of the AGD to body weight was determined (the AGD is correlated with body weight). No changes in the motility and morphology of sperm were observed in F0 and F1 treated males. No treatment related changes were observed in any of the serum hormone levels measured. Bisphenol-A had no effect on sexual maturation or the oestrus cycle in F2 animals and F2 females, respectively. At necropsy, no treatment-related macroscopic findings or organ weight changes were observed in F0 and F1 parental animals. In the offspring (all live pups up to day 21), no clinical signs of toxicity or effects on body weight gain during lactation were observed in F1 and F2 pups. No treatment-related changes were seen in the litter size, survival, sex ratio, AGD and reflex ontogeny. At necropsy, no treatmentrelated macroscopic findings were observed in F1 and F2 pups. Compared to controls, a statistically significant decrease in the absolute (17%) and relative (20%) weight of seminal vesicles (including the coagulating gland) was observed in F2 males only at 2 µg/kg/day. No other treatment-related changes in organ weight were observed in F1 and F2 pups.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.213 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... Groups of 28 female Han-Wistar albino rats were exposed to drinking water that contained 0, 0.01, 0.1, 1.0, or 10 ppm bisphenol A (BPA) or 0.1 ppm diethylstilbestrol (DES), 7 days per week, for a total of 10 weeks. Treatment of the females began at 10 weeks of age and continued throughout a 2-week premating period, 2 weeks of mating (to untreated males), 21-22 days of gestation, and 22 days of lactation. Offspring weanling males were given untreated drinking water and maintained until 90 days of age when evaluations were made of various reproductive organs. ... the female offspring were not evaluated. No treatment-related effects on growth or reproductive endpoints were observed in adult females exposed to any concentration of BPA. Similarly, no treatment-related effects were observed on the growth, survival, or reproductive parameters (including testes, prostate and preputial gland weights, sperm count, daily sperm production, or testes histopathology) of male offspring from dams exposed to BPA during gestation and lactation. DES administered in the drinking water at 0. 1 ppm resulted in decreased body weight, body weight change, and food consumption in adult females. In addition, an increase in the duration of gestation and a decrease in the number of pups delivered and number of live pups were also observed in animals exposed to DES.[Cagen SZ et al; Regul Toxicol Pharmacol 30 (2Pt1): 130-9 (1999)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Two chemicals previously shown to have estrogenic activity, bisphenol A and octylphenol, were examined for their effects on accessory reproductive organs and daily sperm production in male offspring of mice fed these chemicals during pregnancy. ... From gestation day 11-17 female mice were fed an average concentration (dissolved in oil) of bisphenol A or octylphenol of 2 ng/g body weight (2 ppb) and 20 ng/g (20 ppb). The 2 ppb dose of bisphenol A is lower than the amount reported to be swallowed during the first hour after application of a plastic dental sealant (up to 931 micrograms; 13.3 ppb in a 70 kg adult). We found that the 2 ng/g dose of bisphenol A permanently increased the size of the preputial glands, but reduced the size of the epididymides; these organs develop from different embryonic tissues. At 20 ng/g, bisphenol A significantly decreased efficiency of sperm production (daily sperm production per g testis) by 20% relative to control males.[vom Saal FS et al; Toxicol Ind Health 14 (1-2): 239-60 (1998)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ No statistically significant effects on prostate weight or sperm efficiency were recorded for offspring of /CF1 mice/ exposed to either DES (0.2 ug/kg/day) or BPA (2 and 20 ug/kg/day) in utero. Significant dam effects were seen for several of the assay parameters indicating that the litter, as opposed to the individual, should be considered as the statistical unit in such experiments. A statistically significant increase in body weight was recorded for the low dose BPA male offspring. Females from the study underwent normal sexual maturation and showed no significant differences in reproductive tissue weights at termination and the mean day of vaginal opening. ...[Ashby J et al; Regul Toxicol Pharmacol 30 (2Pt1): 155-66 (1999)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ To evaluate the effects of bisphenol A (BPA), a candidate endocrine disruptor (ED), on embryonic development, the mRNA expression levels of the arylhydrocarbon receptor (AhR), which binds with many EDs and plays crucial roles in xenobiotic metabolism, and of the retinoic acid receptor (RAR) alpha and retinoid X receptor (RXR) alpha, key factors in nuclear receptor-dependent retinoid signal transduction, /were examined/ in murine embryos exposed in utero to BPA (0.02, 2, 200, and 20,000 ug/kg/day) at 6.5-13.5 or 6.5-17.5 days post coitum (dpc), using the real-time reverse transcription-polymerase chain reaction (RT-PCR) method. Extremely low-dose BPA (0.02 ug/kg/day; 1/100 the dose of environmental exposure) remarkably increased AhR mRNA expression in the cerebra, cerebella, and gonads (testes and ovaries) of male and female 14.5- and 18.5-dpc-embryos. In utero exposure to BPA at 2, 200, and 20,000 ug/kg/day also increased levels of AhR mRNA. In gonads of 14.5-dpc-embryos, AhR mRNA levels were elevated and showed diphasic (U) dose-response curves following exposure to BPA, but inverted U dose-response curves were obtained for 18.5-dpc-embryos. Exposure to BPA increased expression levels of RARalpha and RXRalpha mRNAs in the cerebra, cerebella, and gonads of male and female 14.5- and 18.5-dpc-embryos. Extremely low-dose BPA (0.02 ug/kg/day) increased RARalpha mRNA expression in the cerebella of male and female 14.5- and 18.5-dpc-embryos and in the gonads of female 14.5-dpc-embryos, and significantly increased RXRalpha mRNA expression in the cerebra and cerebella of male and female 14.5-dpc-embryos. The present findings confirm that in utero exposure to an extremely low dose of BPA up-regulates the mRNA expression of AhR, RARalpha, and RXRalpha in murine embryos and disrupts the receptor-dependent signal transducing systems, and will contribute to the assessment of the toxic effects of BPA on xenobiotic metabolism and retinoid signals in embryogenesis.[Nishizawa H et al; J Reprod Dev 51 (3): 315-24 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The present study examined the effects of two estrogenic chemicals, octylphenol (OP) and bisphenol A (BPA), on epididymal sperm counts and sperm motility, luteinizing hormone (LH)-releasing hormone (LHRH)-stimulated plasma LH and steroid hormones, insulin-like growth factor I (IGF-I), and accessory reproductive organs in pubertal male Wistar rats. Fifty-day-old rats in the OP group (n=11) and BPA group (n=11) received daily sc injections of the respective chemical at a dose of 3 mg/kg bw dissolved in 0.2 mL DMSO. Rats in the control group (DMSO group; n=10) received 0.2 mL DMSO alone. After 2 wk of treatment, a jugular blood sample was taken, and, on the next day, a second blood sample was taken 1 hr after an sc injection of LHRH (250 ng). After 5 wk of treatment, rats were deeply anesthetized and heart blood was collected. Epididymal sperm motility and sperm head counts were determined. LHRH increased plasma LH to higher levels in all groups, but the increases were significant (p<0.01) in the BPA and OP groups. However, despite higher LH levels after LHRH injection, the incremental responses of testosterone and pro-gesterone in the OP and BPA groups were small compared to those in the DMSO group, which showed a small LH response. After 5 wk of treatment, plasma testosterone levels were significantly (p<0.01) reduced in the OP and BPA groups and this was accompanied by reduced (p<0.05) epididymal sperm counts. However, the chemical-treated groups had high basal progesterone levels. No significant effects of chemicals on sperm motility parameters were noted. The chemical-induced increases (p<0.05) of the weight of ventral prostate gland were coincided with elevated plasma IGF-I levels in the BPA (p<0.05) and OP (p<0.01) groups.[Herath CB et al; Endocrine 25 (2): 163-72 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The aim of the present study was to determine the effects of in utero exposure to low, environmentally relevant doses of bisphenol A (BPA) on the development of female reproductive tissues in CD-1 mice. ... in utero exposure to 25 and 250 ng BPA/kg of body weight per day via osmotic pumps implanted into pregnant dams at Gestational Day 9 induced alterations in the genital tract of female offspring that are revealed during adulthood. They include decreased wet weight of the vagina, decreased volume of the endometrial lamina propria, increased incorporation of bromodeoxyuridine into the DNA of endometrial gland epithelial cells, and increased expression of estrogen receptor-alpha (ERalpha) and progesterone receptor in the luminal epithelium of the endometrium and subepithelial stroma.[Markey CM et al; Biol Reprod 72 (6): 1344-51 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Bisphenol A (BPA) (in corn oil) was administered orally to 9-week-old male Sprague-Dawley rats for 14 days (0, 1 and 5 g/kg bw), and incubated primary Sertoli cells from pubertal SD rats with 0, 1X10-7, 1X10-6, 1X10-5, 1X10-4 mol/L BPA. RESULTS: After oral administration, a significant decrease in right testis weight was observed in 5 g/kg dose group, but not in the 1 g/kg bw dose group. Germ cells were detached from basement membrane of seminiferous tubules and Sertoli cells in BPA-treated groups. Administration of BPA at 1 g/kg bw and 5 g/kg bw produced both nucleus pycnosis and vacuolized nucleus in germ cells and Sertoli cells. A marked loss in vimentin staining in Sertoli cells from testis of BPA-treated rats was detected. No change in levels of serum estradiol and testosterone was observed after two-week exposure to BPA.[Deng MX et al; Zhonghua Yu Fand Yi Xue Za Zhi 38 (6): 383-7 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... Gravid Sprague-Dawley dams were administered by gavage either 0.1 or 50 mg/kg per day bisphenol A (BPA) or 0.2 mg/kg per day 17alpha-ethinyl estradiol (EE2) as reference dose on gestation days 6 through 21. Female offspring were killed in estrus. Uterine morphologic changes as well as estrogen receptor (ER) alpha and ERbeta distribution and expression were measured by immunohistochemistry and Western blot analysis. Striking morphologic changes were observed in the uterine epithelium of postpubertal offspring during estrus of the in utero BPA-treated animals (the thickness of the total epithelium was significantly reduced). ERalpha expression was increased in the 50-mg BPA and EE2-treated group. In contrast, ... ERbeta expression in all BPA- and EE2-treated animals /decreased/ when compared with the control.[Schonfelder G et al; Neoplasia 6 (5): 584-94 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Effects of maternal exposure to low doses of bisphenol A (BPA), including those comparable with human exposure levels, on growth and development of the female reproductive system and uterine carcinogenesis in Donryu rats were investigated. Dams were administered BPA (0, 0.006 and 6 mg/kg/day) daily by gavage from gestation day 2 up to the day before weaning (postnatal day 21 at offspring). The serum levels of BPA were significantly elevated in the dams receiving 6 mg/kg/day, however, BPA levels in the milk of dams, and those in the serum and liver of offspring were similar between control and treated groups. The treatment did not exert any influences on uterine development including weight, gland genesis and estrogen receptor alpha expression, vaginal opening and gonadotropin secretion in the female offspring up to puberty. After maturation, no effects were evident with regard to estrous cyclicity in female offspring treated with BPA. In addition, the treatment had no effects on age-related morphological changes of the reproductive and endocrine organs and uterine carcinogenesis until 15 months of age. The results demonstrate that maternal exposure to BPA at levels comparable to human exposure did not have any effects on the female reproductive system of offspring in rats. In addition, BPA was also found in the serum, milk and liver of control dams and pups, and low levels of BPA were detected in drinking water and pellet diet. The present study showed that the experimental animals were also exposed to environmental BPA in the animal room.[Yoshida M et al; J Reprod Dev 50 (3): 349-60 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Retinoic acid receptor (RAR) alpha and retinoid X receptor (RXR) alpha are key factors in a nuclear receptor-dependent signal. To evaluate the effects of bisphenol A (BPA), a candidate endocrine disruptor (ED), on embryonic development, /the investigators/ examined the mRNA levels of RARalpha and RXRalpha in murine embryos, exposed in utero to BPA (2 ug/kg/day) at 6.5-17.5 days post-coitum (dpc), by the real-time reverse transcription-polymerase chain reaction (RT-PCR) method. Higher levels of RARalpha mRNA in cerebra of male and female embryos of control groups were detected at 14.5 dpc. In utero BPA reduced the RARalpha mRNA expression. Higher levels of RXRalpha mRNA in cerebra of male and female embryos were seen at 12.5 dpc. The exposure decreased RXRalpha mRNA expression in male but not female embryos. No remarkable change in the RARalpha mRNA expression level was noted in cerebella of male or female embryos of the control group during embryonic development. Exposure to BPA increased expression levels of RARalpha mRNA in cerebella of male and female embryos at 12.5 dpc. Higher levels of RXRalpha mRNA in cerebella of male and female embryos were seen, but no remarkable changes were noted during embryonic development. BPA significantly decreased the expression levels of RXRalpha mRNA in cerebella of female embryos at 12.5, 14.5 and 18.5 dpc. RARalpha and RXRalpha mRNAs were expressed in gonads (testes and ovaries) of murine embryos from 12.5 to 18.5 dpc. In utero exposure to BPA decreased levels of RARalpha mRNA in testes of 14.5- and 18.5-dpc-embryos, levels of RXRalpha mRNA in testes of 14.5-dpc-embryos, and levels of RXRalpha mRNA in ovaries of 14.5-dpc-embryos.[Nishizawa H et al; J Reprod Dev 49 (6): 539-45 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ In the present study, /the investigators/ examined whether exposure to bisphenol A (BPA), a known endocrine disrupter, during gestation and lactation affects sex difference in the number of corticotropin-releasing hormone-immunoreactive neurons (CRH neurons) in the preoptic area (POA) and the bed nucleus of the stria terminalis (BST). For that purpose, pregnant female Wistar rats (n=8-11 per treatment group) were treated with either 0.1% ethanol (control group) or 10 mg/L BPA (BPA group) dissolved in their drinking water until their offspring were weaned. In the control group, we confirmed a previous report that the POA of female rats contained significantly more CRH neurons than that of male rats (p<0.05). This significant sex difference was also evident in the BPA group, indicating that BPA exposure used in the present study had no effect on the sex difference in CRH neurons in the POA. ... in the control group ... the BST of female rats contained significantly more CRH neurons (p<0.05) than that of male rats. However, this significant sex difference was not observed in the BPA group (p>0.05), suggesting that BPA exposure affected the sex difference in CRH neurons in the BST. Since there was no statistically significant difference in the number of CRH neurons between the control and the BPA group, irrespective of the sex, the results suggested that a loss of sex difference in CRH neurons was due to both an increase in CRH neurons in male rats and a decrease in CRH neurons in female rats.[Funabashi T et al; Psychoneuroendocrinology 29 (4): 475-85 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ This study examined the effects of long-term exposure to the endocrine-disrupting compounds (EDCs) Bisphenol-A (BPA) and Octylphenol (OP) on gonadotrophin secretion in pre-pubertal female sheep. Four-week-old, female lambs were randomly allocated to four groups (n=6), and twice each week treated with im injections of either corn oil (vehicle controls), diethylstilbestrol (DES; 0.175 mg/kg), BPA (3.5 mg/kg) or OP (3.5 mg/kg). After 5 weeks of treatment, animals were ovariectomized (ovx) and ovary weights recorded. Two weeks later, blood samples were collected from lambs every 15min for 6hr, for LH pulse analysis. Animals were then euthanized and adrenal and kidney weight recorded. An age-related increase in tonic LH secretion was noted in Control, BPA- and OP-treated lambs, but was absent in DES-treated lambs. Following ovx, LH secretion increased in all except DES-treated lambs; FSH concentrations increased in all groups. BPA and DES significantly suppressed LH pulse frequency (C: 6.7+/-0.3 pulses/6hr, DES: 1.5+/-0.8 pulses/6hr, BPA: 2.3+/-0.8 pulses/6hr) and amplitude (C: 7.1+/-1.0 ng/mL, DES: 1.9+/-0.6 ng/mL, BPA: 1.6+/-0.4 ng/mL). OP had no effect on LH secretion (Frequency: 5.8+/-0.5 pulses/6hr, amplitude: 8.0+/-2.0 ng/mL). Ovary weight was similar among all groups.[Evans NP et al; Domest Anim Endocrinol 26 (1): 61-73 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ...The present study was designed to investigate whether CaBP-9k expression in the maternal tissues and fetal uterus is altered following maternal treatment with diethylstilbestrol (DES), 17beta-estradiol (E2), 4-tert-octylphenol (OP), nonylphenol (NP) and bisphenol A (BPA) during late pregnancy. The expression level of CaBP-9k mRNA in maternal uterus significantly increased when treated with a high dose (600 mg/kg BW per day) of OP and NP. Interestingly, the expression level of CaBP-9k mRNA in extra-embryonic membrane decreased in a dose-dependent manner, suggesting that the expression level of CaBP-9k mRNA in the fetal membrane may be differentially regulated when compared to the expression of CaBP-9k in maternal uterus. In parallel with CaBP-9k mRNA level, a high dose (600 mg/kg) of OP and BPA resulted in an increase of CaBP-9k protein in maternal uterus and low dose of OP and NP increased the expression level of CaBP-9k protein in the placenta. High doses of BPA (400 and 600 mg/kg) resulted in an increase of CaBP-9k protein in maternal uterus and placenta, indicating that these estrogenic compounds may affect both maternal uterus and placenta in the induction of CaBP-9k mRNA and/or protein. ... Treatment with OP, NP, and BPA induced a significant increase of CaBP-9k mRNA in fetal uterus, indicating that maternally injected estrogenic compounds may transfer directly from placenta to fetus in the induction of fetal uterus CaBP-9k gene.[Hong EJ et al; Mol Cell Endocrinol 212 (1-2): 63-72 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Bisphenol A (BPA), known to be a xenoestrogen, is widely used in industry and dentistry. In the present study, we investigated the effects of BPA on the early development of Xenopus laevis embryos. Stage 6 embryos were exposed to 10-100 uM BPA. Developmental abnormalities were observed when the embryos were exposed to at least 20 uM BPA, with marked developmental abnormalities, such as crooked vertebrae and developmental defects of the head and abdomen, detected in all embryos up to stage 40. Interestingly, apoptosis occurred specifically in central nervous tissue cells of the brain and spinal cord, as assessed by histological analysis. BPA-induced malformations and apoptosis were not observed in embryos exposed to BPA after stage 10. When embryos were exposed to 10 uM 17beta-estradiol (E2), abnormalities were also observed until stage 40. However, the abnormalities induced by BPA and E2 were different and E2 exposure did not induce apoptosis in the central nervous system. Our results indicated that the developmental abnormalities and apoptosis induced by BPA exposure were not inhibited by the addition of E2.[Oka T et al; Biochem Biophys Res Commun 312 (4): 877-82 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Administration of 50 microg of bisphenol A (BPA) for the first 5 days after birth resulted in a decrease in the percentage of moving sperm, and an increase in the incidence of malformed sperm, in the epididymides of mice at 10 weeks of age, although no marked changes were found in the testicular histology between BPA-treated and vehicle-treated control mice. The deteriorating effects of 50 ug of BPA were ameliorated by the concurrent administration of 100 IU of retinol acetate (RA). Neonatal treatment with 0.5 ug of BPA for 5 days resulted in an increase in the incidence of malformed sperm, whereas the BPA effect became more severe in mice nursed by mothers fed a vitamin A-deficient (VAD) diet only a few days before and after parturition. On the other hand, neonatal treatment with 20 ug of estrogen for the first 5 days after birth resulted in an increase in the number of estrogen receptor alpha (ERalpha)-positive cells in the epithelium of the vas deferens, whereas only a few epithelial cells showed weak ERalpha-positive signals in the vehicle-treated control mice at 18 days after birth. This increase, however, was suppressed by the concurrent administration of RA. Although five daily treatments with 50 ug BPA led to no significant increase in the number of ERalpha-positive cells, it may have been due to the weak estrogenic activity of BPA, as discussed. These findings clearly showed that in mice, neonatal exposure to a relatively large dose of BPA causes damage to the motility and morphology of sperm, but the BPA effect is, to some extent, inhibited by a supplement of VA, and enhanced under a VAD condition.[Aikawa H et al; Cell Tissue Res 315 (1): 119-24 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Two potential endocrine-disrupting chemicals, bisphenol A (BPA) and nonylphenol (NP), were assessed for their long-lasting effects on endocrine/reproductive systems following transplacental and lactational exposure to rat offspring during a time-window that included the critical period for brain sexual differentiation. Each chemical was mixed with diet at concentrations of 60, 600 and 3000 ppm and was provided to maternal Sprague-Dawley rats from gestational day (GD) 15 to postnatal day (PND) 10. Ethinylestradiol (EE) at 0.5 ppm was used as an estrogenic reference drug. During pregnancy and lactation, including the exposure period, a soy-free rodent diet was provided to eliminate possible modification of the study results by plant-derived phytoestrogens. Effects on endocrine/reproductive systems were evaluated by examining the anogenital distance, organ weights before puberty, onset of puberty, estrous cyclicity, and organ weights and histopathology of adult endocrine organs (at 11 weeks of age), as well as the volume of the sexually dimorphic nucleus of preoptic area. Both NP and BPA, at high doses, caused decreases in maternal body weights and retardation of offspring growth, but neither affected any of the endocrine/reproductive endpoints of offspring, whereas EE induced irreversible changes in estrous cyclicity and histopathology of ovaries and uterus of adult females.[Takagi H et al; Arch Toxicol 78 (2): 97-105 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The current study was designed to examine the modulating effects of bisphenol A (BPA) on prostate cancer risk in male offspring exposed transplacentally and lactationally. BPA was administered to F344 female rats by gavage at 0, 0.05, 7.5, 30, 120 mg/kg/day during pregnancy and lactation periods. When F1 males reached 5 weeks old, they were given 10 subcutaneous injections of 3,2-dimethyl-4-aminobiphenyl (DMAB) or corn oil vehicle and rats were then sacrificed under ether anesthesia at week 60. There were no observable effects on the accessory sex organ weights of male offspring. Transplacental and lactational exposure to BPA did not affect the incidences of preneoplastic and neoplastic lesions in the accessory sex organs (prostate and seminal vesicle) of F1 rats and did not induce any proliferating lesions without DMAB. Our data suggest that maternal exposure to BPA during the period of pregnancy and lactation does not affect the risk of prostate carcinogenesis in male offspring.[Ichihara T et al; J Toxicol Sci 28 (3): 165-71 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Effects of bisphenol A (BPA) on embryonic and larval development were investigated. In Xenopus laevis blastulae treated with 2.5-3.0X10-5 M BPA or with 1X10-5 M 17beta estradiol (E2), malformation of the head region, scoliosis (curved vertebrate), and suppression of organogenesis were observed. In addition, 1X10-5 - 1X10-4 M BPA blocked tri-iodothyronine (T3)-inducible resorption of the tail segments from premetamorphic (stage 52-54) larvae in vitro. When stage 52 tadpoles were immersed in 1.0-2.5X10-5 M BPA, deceleration of both spontaneous and thyroxin (T4)-induced metamorphic changes occurred. Furthermore, BPA suppressed thyroid hormone receptor (TR) beta gene expression both in vivo and in vitro.[Iwamuro S et al; Gen Comp Endocrinol 133 (2): 189-98 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The effects of bisphenol A and nonylphenol on pubertal development in the intact juvenile/peripubertal male Sprague-Dawley rats was observed in this study from PND23-52/53. Two groups of rats were administered orally with either 100 mg/kg body weight of nonylphenol or bisphenol A. Another group of rats were administered orally with a mixture of 100 mg/kg body weight of nonylphenol and bisphenol A. Control group was administered with the vehicle of Tween-80 with corn oil (1:9 v/v). Observations made in this study included growth, age at preputial separation, thyroid, liver, testis and kidney weight and histology, epididymal and seminal vesicle plus coagulation gland weight. Nonylphenol and bisphenol A have been observed to cause delay in puberty onset as well as testicular damage in the treatment groups when compared to the control; spermatogenesis was affected in most treated rats. Bisphenol A also caused the enlargement of the kidney and hydronephrosis.[Tan BL et al; Toxicol Lett 143 (3): 261-70 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Male Crj:Wistar rats, HsdHot:Holtzman SD rats, Crj:CD-1(ICR) mice and C57BL/6CrSlc mice were administered bisphenol A (BPA) in the diet at a level of 0 (control) and 0.25% for 8 weeks. Daily BPA intake was about 200 and 400 mg/kg for rats and mice, respectively. No conspicuous signs of general or reproductive toxicity were observed after administration in any strain of these animals. Serum testosterone concentrations were not decreased in BPA-fed rats and mice. Successive subcutaneous administration of BPA at a dose of 200 mg/kg/day for 4 weeks significantly decreased the testis, epididymis, prostate and seminal vesicle weights, and the testicular daily sperm production in Jcl:Wistar rats. Successive intraperitoneal administration of BPA at a dose of 20 mg/kg/day for 4 weeks decreased the prostate and seminal vesicle weights but not the testis or epididymis weights. An intraperitoneal dose of 2 mg BPA/kg/day did not cause any toxicity. These results indicate that dietarily administered BPA is less toxic to most strains of rats and mice, and the maximum non-toxic dose and/or minimum toxic dose may be about 200 mg/kg/day.[Takahashi O, Oishi S; Food Chem Toxicol 41 (7): 1035-44 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ The effects of neonatal administration of estrogenic agents on rat reproductive organs were examined. Either bisphenol A (BPA; 0.25, 1, or 4 mg/pup) or 10 ug 17beta-estradiol (E(2)) was given subcutaneously to Sprague-Dawley female rats during the neonatal period from post-natal day (PND) 0 to 9. Animals ovariectomized at 80 days were given subcutaneous injections of 1 ug/kg E(2) for 3 days from PND 94 to 96. Clefts in the clitoris, early vaginal opening, irregular estrous cycles, a decrease in the area occupied by the corpora lutea (CL) in the ovary, and multiple cystic follicles in the ovary were found in the animals treated neonatally with 1mg BPA. Uterine fluid weight measured after E(2) treatment on PND 94-96 was less than controls. In addition to these abnormalities, unusual body weight gains, persistent vaginal cornification, and lack of CL were observed in females treated neonatally with 4 mg BPA. The ovary weight on PND 80 and uterine fluid weight measured after E(2) treatment on PND 94-96 were less than controls for the 4 mg BPA group. Neonatal treatment with 10 ug E(2) induced similar abnormalities as found in the 4 mg BPA group.[Kato H et al; Reprod Toxicol 17 (3): 283-8 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... This study examined the effect of bisphenol A (BPA) on the sexual differentiation of open-field behavior and the sexually dimorphic nuclei in the brain of the offspring of rats exposed to BPA during the fetal and suckling periods at a dosage below the human tolerable daily intake (TDI) level. In the control group, females were more active in the open field and had a larger locus coeruleus (LC) volume than males. BPA abolished and inverted the sex differences of the open-field behavior and the LC volume, respectively, without affecting the reproductive system ...[Kubo K et al; Neurosci Res 45 (3): 345-56 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ...In a series of experiments focusing on rat sensitivity to gestational and lactational exposure to BPA, ... its effects on gestation period and reproductive organs in male offspring /were investigated/. In the first instance, BPA was administered to F344 female rats by gavage at 0, 7.5, 120 mg/kg/day during pregnancy and lactation period. There were no observable adverse effects in pregnant rats and the treatment did not induce any morphological abnormalities in the accessory sex organs of male offspring. However, lowered numbers of sperm in the testis were found with a dose of 120 mg/kg/day. In the second study, the same protocol with a higher number of male offspring was applied, but no reduction in the sperm count was apparent.[Yoshiho H et al; J Toxicol Sci 27 (5): 433-9 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Pregnant Sprague-Dawley (SD) and Alderley Park (Wistar derived) rats were exposed by gavage during gestation days 6-21 to 20 ug/kg, 100 ug/kg, or 50 mg/kg body weight of BPA with ethinylestradiol (EE; 200 ug/kg) acting as a positive control agent. The sexual development of the derived pups was monitored until termination at postnatal day 90-98. The endpoints evaluated were litter size and weight, anogenital distance at birth, days of vaginal opening, first estrus and prepuce separation, weights of the liver, seminal vesicles, epididimydes, testes, ventral prostate, uterus, vagina, cervix and ovaries, and daily sperm production. Males were terminated at postnatal day 90 and females at postnatal day 98. The only statistically significant effects observed for any dose of BPA were a decrease in daily sperm production and an increase in the age of vaginal opening for the Alderley Park animals at the highest dose evaluated (50 mg/kg). The dose of EE evaluated proved to be maternally toxic in our laboratory, but provided gross evidence of endocrine disruption in the treated dams.[Tinwell H et al; Toxicol Sci 68 (2): 339-48 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Bisphenol A (BPA) was evaluated at concentrations of 0, 0.015, 0.3, 4.5, 75, 750, and 7500 ppm (approximately 0.001, 0.02, 0.3, 5, 50, and 500 mg/kg/day of BPA) administered in the diet ad libitum to 30 CD((R)) Sprague-Dawley rats/sex/dose for 3 offspring generations, 1 litter/generation, through F3 adults. Adult systemic toxicity at 750 and 7500 ppm in all generations included: reduced body weights and body weight gains, reduced absolute and increased relative weanling and adult organ weights (liver, kidneys, adrenals, spleen, pituitary, and brain), and female slight/mild renal and hepatic pathology at 7500 ppm. Reproductive organ histopathology and function were unaffected. Ovarian weights as well as total pups and live pups/litter on postnatal day (PND) 0 were decreased at 7500 ppm, which exceeded the adult maximum tolerated dose (MTD). Mating, fertility, gestational indices; ovarian primordial follicle counts; estrous cyclicity; precoital interval; gestational length; offspring sex ratios; postnatal survival; nipple/areolae retention in preweanling males; epididymal sperm number, motility, morphology; daily sperm production (DSP), and efficiency of DSP were all unaffected. At 7500 ppm, vaginal patency (VP) and preputial separation (PPS) were delayed in F1, F2, and F3 offspring, associated with reduced body weights. Anogenital distance (AGD) on PND 0 was unaffected for F2 and F3 males and F3 females (F2 female AGD was increased at some doses, not at 7500 ppm, and was considered not biologically or toxicologically relevant). Adult systemic no observed adverse effect level (NOAEL) = 75 ppm (5 mg/kg/day); reproductive and postnatal NOAELs = 750 ppm (50 mg/kg/day). There were no treatment-related effects in the low-dose region (0.001-5 mg/kg/day) on any parameters and no evidence of nonmonotonic dose-response curves across generations for either sex.[Tyl RW et al; Toxicol Sci 68 (1): 121-46 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ A 28-day repeated-dose toxicity study of ethynylestradiol (EE) and bisphenol A (BPA) based on the draft protocol of the "Enhanced OECD Test Guideline no. 407" /was performed/, and the sensitivity of a list of parameters for detecting endocrine-related effects of endocrine disruption /were assessed/. Doses of EE at 0, 10, 50 or 200 ug/kg per day, or BPA at 0, 40, 200 or 1000 mg/kg per day were orally administered to Sprague-Dawley rats. The highest dose of BPA was decreased to 600 mg/kg per day from the second week of administration because a male rat given 1000 mg/kg BPA had died within 1 week with toxic clinical signs. In the assay using EE, the decrease of prostate, seminal vesicle and pituitary weights, increase of the testis weight, atrophic changes of the prostate, seminal vesicle and mammary gland, and degenerative changes in the testes were detected in male rats in the 50 and/or 200 ug/kg groups. In females of the 200 ug/kg group, decrease of the ovary weight, increase of the uterine weight, atrophy of the ovary, hypertrophy or squamous metaplasia of the uterine epithelial cells and mucification in the vagina were observed. Furthermore, diestrous, estrous or the unknown stage was prolonged in the 50 and 200 ug/kg groups of rats. Endocrine-mediated effects of EE were not detected in general observations, hematology, serum biochemistry, or hormonal or spermatological examinations. In the assay using BPA, the diestrous stages were prolonged at the highest dose, but changes related to endocrine effects were not detected in other examinations.[Yamasaki K et al; Arch Toxicol 76 (2): 65-74 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ ... The effects of fetal exposure to bisphenol A (BPA) on the development of the mammary gland /were assessed/. CD-1 mice were exposed in utero to low, presumably environmentally relevant doses of BPA (25 and 250 ug/kg body weight), and their mammary glands were assessed at 10 days, 1 mo, and 6 mo of age. Mammary glands of BPA-exposed mice showed differences in the rate of ductal migration into the stroma at 1 mo of age and a significant increase in the percentage of ducts, terminal ducts, terminal end buds, and alveolar buds at 6 mo of age. The percentage of cells that incorporated BrdU was significantly decreased within the epithelium at 10 days of age and increased within the stroma at 6 mo of age. These changes in histoarchitecture, coupled with an increased presence of secretory product within alveoli, resemble those of early pregnancy, and they suggest a disruption of the hypothalamic-pituitary-ovarian axis and/or misexpression of developmental genes. The altered relationship in DNA synthesis between the epithelium and stroma and the increase in terminal ducts and terminal end buds are striking, because these changes are associated with carcinogenesis in both rodents and humans.[Markey CM et al; Biol Reprod 65 (4): 1215-23 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ The B(II) bioassay was developed as a rapid and reliable tool for detecting potential insect growth regulators acting as ecdysteroid receptor (ant)agonists. Based on an ecdysteroid-responsive cell line from Drosophila melanogaster, this microplate assay is ideally suited to the evaluation of environmental contaminants as potential endocrine disrupters. ...Among the industrial chemicals, antagonistic activity was observed for bisphenol A median effective concentration (EC50) of 1.0X10-4 M and diethylphthalate (EC50 of 2.0X10-3 M). ...For lindane, bisphenol A, and diethylphthalate, activity is not associated with impurities in the samples and, for lindane and bisphenol A at least, the compounds are able to compete with ecdysteroids for the ligand binding site on the receptor complex, albeit at concentrations very much higher than those found in the environment. ...[Dinan L et al; Envrion Toxicol Chem 20 (9): 2038-46 (2001)] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ ... The hypothesis that the low-dose effects of estrogens on the developing prostate are associated with increased expression of androgen receptor (Ar) and estrogen receptor 1 (alpha) (Esr1) genes in mesenchyme cells /was tested/. Ar and Esr1 mRNA levels were quantified in primary cultures of fetal mouse prostate mesenchyme cells treated with 17beta-estradiol (E(2)) and bisphenol A (BPA). Ar and Esr1 mRNA expression increased in response to E(2), with thresholds of 0.001 and 0.037 nM, respectively; and in response to BPA, with a threshold of 1 nM for both mRNAs. ...[Richter CA et al; Environ Health Perspect 115 (6): 902-8 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ Androgen-like effects of bisphenol A (BPA) using orchiectomized Wistar rats /were examined/. Animals were treated po either with vehicle or with 3, 50, 200, 500 mg/kg bw/day BPA (n=13) for 7 days. One group was treated sc with 1 mg/kg bw/day testosterone propionate (TP). Flutamide (FL) (3 mg/kg bw/day, po) was used to antagonize androgen effects of the supraphamacological dose (500 mg/kg bw/day) of BPA. Androgen-like effects of BPA on prostates and seminal vesicles were assessed by the Hershberger assay, densitometric analysis of androgen receptor (AR) immunoreactivity, cell proliferation-index and a morphometric analysis. Absolute weights of prostates and seminal vesicles were not increased by BPA, whereas the relative weights were increased at higher doses of BPA, most likely due to a decrease in body weight. Staining intensity for AR immunoreactivity was increased at low but not at higher doses of BPA in comparison to the orchiectomized rats. BPA at all doses tested did not cause an increase of the cell proliferation-index. Epithelial height and glandular luminal area were increased by low doses of BPA, whereas higher doses caused a decrease of these parameters.[Nishino T et al; J Steroid Biochem Mol Biol 98 (2-3): 155-63 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ This study aimed to test the potential inhibitory effects of bisphenol A (BPA) on meiotic cell cycle progression, centrosomes and spindle integrity in mouse cumulus-oocyte complexes (COCs). They were exposed to BPA (10-30 uM; 2.3-6.8 ppm) during meiosis-I and the formation of metaphase-II (M-II) spindle. Exposure to BPA during meiosis-I caused a dose-dependent retardation/inhibition of cell cycle progression; 74 and 61% of cells reached metaphase-I (M-I) in the presence of 10 and 30 uM BPA, respectively, (81% in controls, P<0.001). A more striking delay was noted when oocytes were exposed to BPA during the formation of M-II spindle, i.e. 61 and 41% of cells (94% in controls, P<0.001) reached M-II while the remaining cells remained at M-I. Depending on dose, both (i) loosening and elongation of meiotic spindles and (ii) compaction and dispersion of pericentriolar material (PCM) were noted in all samples, all of which resulted in a series of spindle abnormalities. Interestingly, no chromosome was detected in the first polar body after the 10 and 30 uM BPA treatments. When the cells were freed from BPA exposure at 10 and 30 uM, 70 and 61%, of the cells succeeded in reaching M-II (93% in controls, P<0.001), respectively.[Can A et al; Mol Hum Reprod 11 (6): 389-96 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ ... The uterotrophic activity of bisphenol A (BPA) to the immature rat has been re-evaluated over the dose range 2 ug/kg-800 mg/kg/day. Expression levels of three estrogen responsive uterine genes were determined using real-time RT-PCR--namely, complement component 3, lipocalin 2, and progesterone receptor (PR). 18S rRNA and RNA polymerase II large subunit acted as control genes. Observations of gene expression were made 4 hr and 72 hr after the first of three daily po administrations of BPA. Increases in gene expression were observed over the uterotrophic dose range (approximately 200-800 mg/kg BPA). Over the dose range 2 ug/kg-20 mg/kg BPA there was no uterotrophic response and no increase in gene expression.[Ashby J, Odum J; Toxicol Sci 82 (2): 458-67 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ ... The effects of phytoestrogens (genistein, daidzein, and coumestrol) and environmental estrogens (bisphenol A (BPA), p-n-nonylphenol (NP) and bis(2-ethylhexyl)phthalate (DEHP)) on osteoblast differentiation using MC3T3-E1 cells, a mouse calvaria osteoblast-like cell line /were studied/. Coumestrol (10X10-10 to 10X10-6 M) slightly enhanced cell proliferation, while neither the other phytoestrogens (daidzein, genistein) nor environmental estrogens increased cell proliferation. Alkaline phosphatase (ALP) activity and cellular calcium (Ca) and phosphorus (P) contents were increased by phytoestrogens and BPA; however, neither NP nor DEHP affected those osteoblastic indicators.[Kanno S et al; Toxicology 196 (1-2): 137-45 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ Alkylphenols, such as p-nonylphenol (NP) and 4-tert-octylphenol (OP) and bisphenol A (BPA) are thought to mimic estrogens in their action, and are called endocrine disrupters. /The investigators/ examined whether these endocrine disrupters affected progesterone receptor (PR) mRNA expression in the adult female rat neocortex. In one experiment, at 12.00 hr, ovariectomized rats were given a subcutaneous injection of 10 mg of NP, 10 mg of OP or 10 mg of BPA, or sesame oil alone as control. Twenty-four hours after injection, the left side of the frontal cortex, parietal cortex and temporal cortex was collected. In a second experiment to study the time-course of the effects of BPA on PR mRNA, the ovariectomized rats were given a subcutaneous injection of 10 mg of BPA and killed 0, 6, 12 and 24 hr after injection. In addition to the frontal cortex and temporal cortex, the occipital cortex was also collected. Northern blotting revealed that, in the first experiment, injection of NP, OP or BPA significantly increased PR mRNA expression in the frontal cortex but not in the parietal cortex. In the temporal cortex, BPA significantly decreased PR mRNA, but NP and OP produced no significant changes. The second experiment revealed that, in the frontal cortex, BPA induced a significant increase in PR mRNA expression at 6 h after injection, which lasted until 24 hr after injection. In the temporal cortex, PR mRNA expression was significantly decreased 6 hr after injection of BPA and was still significantly low 24 hr after injection. No significant change was observed in the occipital cortex.[Funabashi T et al; J Neuroendocrinol 16 (2): 99-104 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ Bisphenol A (BPA) was examined for its effects on cultured Sertoli cells established from 18-day-old rat testes. We demonstrated that exposure of cultured Sertoli cells to BPA decreased the cell viability in a dose- and a time-dependent manner and that exposure to BPA brought about morphologic changes of the cells, such as membrane blebs, cell rounding, cytoskeletal collapse, and chromatin condensation or fragmentation, all of which conform to the morphologic criteria for apoptosis. Immunocytochemistry showed that active caspase-3, a major execution caspase, was expressed in round Sertoli cells positively labeled by the TUNEL method. Co-localization of active caspase-3 and aggregated actin fragments was also observed in the round Sertoli cells. Theses results suggest that BPA induces cell death of Sertoli cells by promoting apoptosis. Apoptosis-inducing cell death was observed in cells exposed to 150-200 uM BPA, while BPA at <100 uM had only slight cytotoxic effects on the cells.[Iida H et al; Reprod Toxicol 17 (4): 457-64 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ By using a yeast detection system for androgenic and antiandrogenic effects of chemicals, ... bisphenol A (BPA) and nonylphenol (NP) /were identified/ as antiandrogens. In this study, molecular mechanisms for the antiandrogenic action of BPA and NP /are examined/. In the ARhLBD-activating signal cointegrator 1 (ASC1) yeast two-hybrid system, which reflects the androgen-dependent interaction between androgen receptor (AR) and its coactivator, ASC1, BPA and NP acted as potent AR antagonists comparable to a known strong antagonist, cyproterone acetate. Ligand competition assays revealed that [3H]5alpha-dihydroxytestosterone (DHT) binding to AR is inhibited a maximum of 30 and 40% at approximately 5 nM of NP and 50 nM of BPA, respectively. In addition, the nuclear translocation of green fluorescent protein (GFP)-AR fusion protein in the presence of testosterone was affected by the addition of BPA and NP, which cause rather dispersed distribution of GFP-AR between the nuclear and the cytoplasmic compartments. Furthermore, in transient transfection assays, BPA and NP inhibited androgen-induced AR transcriptional activity. Taken together, the results suggest that BPA and NP affect multiple steps of the activation and function of AR, thereby inhibiting the binding of native androgens to AR, AR nuclear localization, AR interaction with its coregulator, and its subsequent transactivation.[Lee HJ et al; Toxicol Sci 75 (1): 40-6 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ ... This study to investigated the effect of bisphenol A (BPA) on erectile function. New Zealand white rabbits were treated intraperitoneally with 150 mg/kg of BPA every other day for 12 days (cumulative dose of 900 mg/kg). Four and 8 weeks after administration of BPA, the contractions and relaxation of cavernosal tissue strips were significantly suppressed in the BPA-treated animals compared to the control animals. Histologically, thickening of tunica albuginea, subtunical deposition of fat and decreased sinusoidal space with consequent increase of trabecular smooth muscle content were observed in the BPA-treated animals.[Moon DG et al; Int J Impot Res 13 (5): 309-16 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ The immature rat uterotrophic assay /was used/ to determine the estrogenicity of bisphenol A (BPA). We administered BPA (in sesame oil) to rats subcutaneously (sc; 0, 8, 40, and 160 mg/kg/day) or orally (0, 40, 160, and 800 mg/kg/day) for 3 days beginning on postnatal day (PND) 18; rats were sacrificed 24 hr after the last administration. Uterine wet, blotted, and relative weights increased in all groups given BPA sc. After oral administration, uterine relative weight increased in 160 and 800 mg/kg BPA groups, and wet and blotted weights increased in the 800 mg/kg BPA group. Plasma concentrations of BPA at 1 hr after the last administration were detected in all groups given BPA sc and in groups given 160 and 800 mg/kg BPA orally, with a dose-response effect. The study was then reproduced under the same conditions. After sc injections, uterine wet and blotted weights increased in the 40 and 160 mg/kg BPA groups, and relative weight increased in all groups given BPA sc. By contrast, uterine wet, blotted, and relative weights increased only in the 160 and 800 mg/kg oral BPA groups. Also, to examine time-course changes in uterine weight, we administered BPA (in sesame oil) sc from PND 18 to PND 20 for 3 days at doses of 0, 8, 40, and 160 mg/kg/day; uterine weights were then measured at 6, 12, 18, and 24 hr after the last administration. Uterine wet, blotted, and relative weights increased in all BPA groups at 6 and 24 hr and in 40 and 160 mg/kg BPA groups at 12 hr. By contrast, at 18 hr, uterine wet, blotted, and relative blotted weights increased in all BPA groups and relative wet weight increased in 40 and 160 mg/kg BPA groups. The percentage increases in uterine wet and relative weights of 40 and 160 mg/kg BPA groups at 6 hr were higher than those at 24 hr relative to the controls, but the coefficient of variation in these weights in the group given 8 mg/kg BPA at 24 hr was smaller than that at 6 hr.[Yamasaki K et al; Environ Health Perspect 108 (12): 1147-50 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ In this study, the effects of BPA on uterine wet weight and morphology /were compared/ to those of E(2) in the B6C3F1 ovariectomized mouse. To examine whether these effects were mediated through the ER, the antiestrogen ICI 182, 780 (ICI) was co-administered with BPA or E(2). ... subcutaneous administration of BPA at doses between 0.8 and 8 mg/day over 4 days significantly increased mean uterine wet weights above those of vehicle (corn oil)-treated mice. BPA (2 mg/day) and E(2) (40 ng/day) induced a significant increase in luminal epithelial height and in the thickness of both the stromal and myometrial layers of the uterus. The effects of 40 ng E(2)/day on all endpoints studied were reversed by 20 ug ICI/day. ICI at 200, but not 20 ug/day, was able to reverse the BPA (2 mg/day)-induced increase in both uterine wet weight and luminal epithelial height.[Papaconstantinou AD et al; Toxicol Sci 56 (2): 332-9 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/ALTERNATIVE and IN VITRO TESTS/ The treatment of ovariectomized (OVX) Wistar rats with BPA at doses of 11-250 mg/kg per day, sc, for 7 days, resulted in significant dose-dependent regrowth of uterus in uterotrophic assay. Additionally, the stimulation of anterior pituitary gland growth and induction of hyperprolactinaemia, as determined by wet organ weight and radioimmunoassay (RIA), respectively, were also dose-dependent (at 128 and 250 mg/kg per day, P < 0.05). Prolactin immunostaining of anterior pituitary glands revealed that BPA at a dose of 250 mg/kg per day increased the number of prolactin-immunopositive cells by 63% compared to OVX rats. These results demonstrate that the reproductive tract and neuroendocrine axis of Wistar rats are able to respond to BPA. Furthermore, the pituitary gland hypertrophy and hyperprolactinaemia can be mediated, at least partly, by increase in number of prolactin-immunoreactive cells.[Goloubkova T et al; Arch Toxicol 74 (2): 92-8 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ ... Estrogen receptors (ER) participate in some of these genotoxic effects by estrogen. In this study, the effects of bisphenol A (BPA), an endocrine-disrupting chemical eliciting weak estrogenic activity, and of 17beta-estradiol (E2), on DNA damage in ER-positive MCF-7 cells /were examined/ by Comet assay. Higher concentrations of BPA, more than 1000 times of E2, were needed to induce the same levels of effects by E2. Immunofluorescence microscopy showed that gammaH2AX, an early marker of DNA breaks, increased after treatment with E2 or BPA in MCF-7 cells. gammaH2AX foci colocalized with Bloom helicase, which is considered to be responsible for the repair of DNA damage after treatment with E2 or BPA. Interestingly, DNA damage was not as severe in ER-negative MDA-MB-231 cells as in MCF-7 cells. The ER antagonist ICI182780 blocked E2 and BPA genotoxic effects on MCF-7 cells. These results together suggest that BPA causes genotoxicity ER dependently in the same way as E2.[Iso T et al; Biol Pharm Bull 29 (2): 206-10 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ The ability of bisphenol-A to induce DNA single strand breaks in primary rat hepatocytes was investigated by an alkaline elution method. Cells were exposed to 0.2-0.5 nM bisphenol-A for 3 hours and then harvested. Cells irradiated with gamma radiation served as the positive controls. A dose-related increase in DNA single strand breaks was observed with bisphenol-A, with the criteria for a positive result (a >3.0 fold increase in the elution slope) being seen at 0.4 nM. However, cytotoxicity was observed from 0.2 nM bisphenol-A. Thus, in this study, bisphenol-A was only observed to induce DNA damage at concentrations that produced cytotoxicity.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.191 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value

NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ Chinese hamster ovary (CHO) cells were exposed in two separate experiments to 30-50 ug/mL bisphenol-A for 2 hours with metabolic activation and 20-40 ug/mL for 8 hours without metabolic activation. Cells were harvested at 11 hours with metabolic activation and 21 hours without metabolic activation. In the first test with metabolic activation, an increase in the percentage of metaphases with chromosome aberrations from bisphenol-A treated cultures was observed only at the top dose in the presence of cytotoxicity; 14% at 50 ug/mL compared to 3% in controls. In these high-dose cultures, it was stated that cell confluence was reduced by approximately 70%. In the second test, no significant increases were observed in with metabolic activation; only 3% of cells at the highest dose had aberrations. No significant increases in aberrations were observed without metabolic activation with bisphenol-A evidently being tested up to “toxic levels.” The positive controls produced clear increases in chromosome aberrations.[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.188 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ Bisphenol A tested negative in the following genetic toxicity tests: Ames test with and without metabolic activation at concentrations < or = 333.3 ug/plate in strains TA1535, TA1537, TA98, or TA100; at 5-1250 ug/plate in S. typhimurium strains TA100, TA1535, TA98, and TA1537 with and without metabolic activation; in the Bacterial gene mutation assay with E.coli WP2uvrA at 5-1250 ug/plate with and without metabolic activation; and in the cytogenetic assay with Chinese Hamster Ovary cells.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.78 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ V79 Chinese Hamster cells were incubated for 6 hr with bisphenol A at a concentration which did not cause gross cytotoxicity; the number of micronucleated cells was then determined using CREST antikinetochore antibodies to distinguish micronuclei (MN) containing whole chromosomes/ chromatids from non-MN containing chromosomal fragments. A clear induction of MN was observed with bisphenol A (200 uM).[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.78 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ No mutagenic response was observed for bisphenol A in the Drosophila melanogaster SLRL test when administered by oral feed at 10,000 ppm for 72 hours.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.82 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/GENOTOXICITY/ Bisphenol A tested negative in the in vivo dominant lethal assay in rats treated with 85 mg/kg bw/day for 5 days.[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.82 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/IMMUNOTOXICITY/ ... Bisphenol A (BPA) was orally administered to T cell receptor transgenic mice, and the antigen-specific responses of immune cells were investigated. Administered BPA moderately reduced interleukin (IL)-2, 4, and interferon (IFN)-gamma secretion and increases in IgA and IgG2a production. Additionally, it was found that orally administered BPA increased antigen-specific IFN-gamma production of T cells and modified whole antigen presenting cells (APCs) to suppress antigen-specific cytokine production from T cells. ...[Goto M et al; Biosci Biotechnol Biochem 71 (9): 2136-43 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTOX - NON-HUMAN TOXICITY EXCERPTS	/IMMUNOTOXICITY/ To investigate the effects of the estrogen receptor-binding molecule bisphenol A (BPA) on murine immune function in vivo, a low dose of 2.5 ug BPA/kg body weight/day /was fed/ to both normal C57BL/6 and lupus-prone NZB X NZW F(1) (NZB/NZW) 5-week-old mice for 1 week. Analysis of concanavalin A (ConA)-stimulated splenic mononuclear cells by ELISA demonstrated that BPA-fed C57BL/6 males produced, on average, 40% less interferon-gamma (IFN-gamma; p < 0.01) and C57BL/6 females 28% less IFN-gamma (p < 0.05) compared with controls. Treated female NZB/NZW mice were monitored for lupus disease symptoms, defined as proteinuria (> 100 mg/dL albumin in urine for 2 consecutive weeks). Before the development of proteinuria, BPA-fed NZB/NZW mice produced significantly less ConA-stimulated IFN-gamma than did controls and displayed an average reduction of 50% in immunoglobulin G2a (IgG2a) antibody production from lipopolysaccharide (LPS)-stimulated splenocytes (p < 0.05). It is striking that 5-week-old female NZB/NZW mice fed a 7-day low-dose course of BPA developed proteinuria an average of 7 weeks later than did controls. Once proteinuria developed, splenocytes were stimulated with ConA for cytokine analysis. The BPA-fed mice showed a dramatic reduction of 64% in IFN-gamma production and a 32% reduction in ConA-stimulated interleukin-10 (p < 0.05). The long-lasting effects of BPA on IFN-gamma and IgG2a production likely contributed to the increased symptom-free period of the NZB/NZW mice.[Sawai C et al; Environ Health Perspect 111 (16): 1883-7 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rat (male, F344) oral 4100 mg/kg[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p.4 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rat (female, F344) oral 3300 mg/kg[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p.4 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value

NTXV - NON-HUMAN TOXICITY VALUES	LD50 Mouse (male) oral 5280 mg/kg[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p.4 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Mouse female (B6C3F1) oral 4100 mg/kg[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p.4 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Mouse oral 2500 mg/kg[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p.1 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rabbit oral 2230 mg/kg[Verschueren, K. Handbook of Environmental Data on Organic Chemicals. Volumes 1-2. 4th ed. John Wiley & Sons. New York, NY. 2001, p. 1357] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	Ld50 rabbit ip 150 mg/kg[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.54 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
NTXV - NON-HUMAN TOXICITY VALUES	LD50 Rabbit dermal 3600 mg/kg (24 hr-covered applcation)[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.52 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Menidia menidia (Atlantic silverside); Conditions: saltwater, flow through, 22 deg C, salinity 20 ppt; Concentration: 12000 ug/L for 24 hr (95% confidence interval: 9800-16000 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Menidia menidia (Atlantic silverside); Conditions: saltwater, flow through, 22 deg C, salinity 20 ppt; Concentration: 11000 ug/L for 48 hr (95% confidence interval: 5900-16000 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Menidia menidia (Atlantic silverside); Conditions: saltwater, flow through, 22 deg C, salinity 20 ppt; Concentration: 9400 ug/L for 72 hr (95% confidence interval: 8300-11000 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Menidia menidia (Atlantic silverside) 9.4 (8.3 to 11) mg/L/96 hr /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Selenastrum capricornutum (algae) 2.7 mg/L/96 hr; Effect: decreased cell count /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Selenastrum capricornutum (algae) 3.1 mg/L/96 hr; Effect: decreased cell volume /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, flow through, 17 deg C; Concentration: 4700 ug/L for 24 hr (95% confidence interval: 3600-5400 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, static, 17 deg C; Concentration: 4700 ug/L for 24 hr (95% confidence interval: 4000-5500 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, flow through, 17 deg C; Concentration: 4600 ug/L for 48 hr (95% confidence interval: 3600-5400 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value

ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, static, 17 deg C; Concentration: 4700 ug/L for 48 hr (95% confidence interval: 4000-5500 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, flow through, 17 deg C; Concentration: 4600 ug/L for 72 hr (95% confidence interval: 3600-5400 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Pimephales promelas (Fathead minnow); Conditions: freshwater, static, 17 deg C; Concentration: 4700 ug/L for 72 hr (95% confidence interval: 4000-5500 ug/L) /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Pimephales promelas (Fathead minnow) 4.7 mg/L/96 hr (95% confidence interval: 4.0-5.5 mg/L); static[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Pimephales promelas (Fathead minnow) 4.6 mg/L/96 hr (95% confidence interval: 3.6-5.4 mg/L); flow-through[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Selenastrum capricornutum (Algae) 2.7-3.1 mg/L/96hr; EC50 values are based on 50% inhibition of cell count (2.7 mg/L) and total cell volume (3.1 mg/L) compared to controls. /Conditions of bioassay not specified/[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.37 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Skeletonema costatum (Diatom) 1.0 mg/L/96 hr; Effect: decreased cell count and relative fluorescence /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Skeletonema costatum (Diatom) 1.8 mg/L/96 hr; Effect: decreased chlorophyll a content /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Mysidopsis bahia (Mysid) 1.1 mg/L/96 hr (95% confidence interval: 0.92-1.2 mg/L) /Conditions of bioassay not specified in source examined/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988)] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50; Species: Daphnia magna (Water flea); Conditions: freshwater, static, 20 deg C; Concentration: 15500 ug/L for 24 hr (95% confidence interval: 14400-16700 ug/L); Effect: intoxication, immobilization /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50; Species: Daphnia magna (Water flea); Conditions: freshwater, static, 20 deg C; Concentration: 10200 ug/L for 48 hr (95% confidence interval: 9200-11400 ug/L); Effect: intoxication, immobilization /polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Americamysis bahia (Opossum shrimp); Conditions: saltwater, flow through, 25 deg C, salinity 20 parts per thousand; Concentration: 3300 ug/L for 24 hr (95% confidence interval: 2600-5700 ug/L) /Polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Americamysis bahia (Opossum shrimp); Conditions: saltwater, flow through, 25 deg C, salinity 20 parts per thousand; Concentration: 1600 ug/L for 48 hr (95% confidence interval: 1300-1900 ug/L) /Polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Americamysis bahia (Opossum shrimp); Conditions: saltwater, flow through, 25 deg C, salinity 20 parts per thousand; Concentration: 1200 ug/L for 72 hr (95% confidence interval: 1000-1300 ug/L) /Polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value

ETXV - ECOTOXICITY VALUES	LC50; Species: Americamysis bahia (Opossum shrimp); Conditions: saltwater, flow through, 25 deg C, salinity 20 parts per thousand; Concentration: 1100 ug/L for 96 hr (95% confidence interval: 920-1200 ug/L) /Polycarbonate grade, 99.93% purity/[Alexander HC et al; Environ Toxicol Chem 7 (1): 19-26 (1988) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Mysidopsis bahia (Mysid shrimp, 6 day-old) 3.3 mg/L (2.6 to 5.7 mg/L)/24 hr; Conditions: Flow-through bioassay, 24 to 25 deg C, Hardness 20 mg CaCO3/L, pH = 7.5 to 8.1[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Mysidopsis bahia (Mysid shrimp, 6 day-old) 1.6 mg/L (1.3 to 1.9 mg/L)/48 hr; Conditions: Flow-through bioassay, 24 to 25 deg C, Hardness 20 mg CaCO3/L, pH = 7.5 to 8.1[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Mysidopsis bahia (Mysid shrimp, 6 day-old); 1.2 mg/L (0.92 to 1.2 mg/L)/72 hr; Conditions: Flow-through bioassay, 24 to 25 deg C, Hardness 20 mg CaCO3/L, pH = 7.5 to 8.1[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Mysidopsis bahia (Mysid shrimp, 6 day-old); 1.1 mg/L (0.92 to 1.2 mg/L)/96 hr; Conditions: Flow-through bioassay, 24 to 25 deg C, Hardness 20 mg CaCO3/L, pH = 7.5 to 8.1[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Oryzias latipes 15 mg/L/48 hr; Semistatic bioassay according to OECD Guideline 305 C[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.33 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Oryzias latipes (Medaka, high-eyes, embryos); Conditions: freshwater, renewal, 20 deg C, pH 7.0-7.4; Concentration: 5100 ug/L for 72 hr (95% confidence interval: 4200-6700 ug/L) /99.5% purity/[Kashiwada S et al; Water Res 36 (8): 2161-6 (2002) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Oryzias latipes (Medaka, high-eyes, mature males); Conditions: freshwater, renewal, 20 deg C, pH 7.0-7.4; Concentration: 6800 ug/L for 72 hr (95% confidence interval: 5900-7700 ug/L) /99.5% purity/[Kashiwada S et al; Water Res 36 (8): 2161-6 (2002) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50; Species: Oryzias latipes (Medaka, high-eyes, adult females); Conditions: freshwater, renewal, 20 deg C, pH 7.0-7.4; Concentration: 8300 ug/L for 72 hr (95% confidence interval: 7400-9400 ug/L) /99.5% purity/[Kashiwada S et al; Water Res 36 (8): 2161-6 (2002) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	IC50 Oryzias latipes (Medaka, high-eyes, eggs) 9.0 mg/L/72 hr Effect: inhibition of egg hatching /Conditions of bioassay not specified in source examined/[Kashiwada S et al; Water Res 36 (8): 2161-6 (2002) Available from, as of September 20, 2007: http://cfpub.epa.gov/ecotox/quick_query.htm] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Hydra vulgaris 6.9 mg/L for 96-hr /Conditions of bioassay not specified/[Pascoe D et al; Arch Environ Contam Toxicol 43 (1): 56-63 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Acartia tonsa (copepod) 10-12 day-old; 3.4-5.0 mg/L/48 hr (nominal concentrations); Static bioassay; Conditions: Temp 20 deg C, Hardness 18 mg CaCO3/L[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p. 71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Acartia tonsa (copepod) 10-12 day-old; 5.1-6.3 mg/L/24 hr (nominal concentrations); Static bioassay; Conditions: Temp 20 deg C, Hardness 18 mg CaCO3/L[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.71 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Xiphophorus helleri (Swordtail fish) 17.93 mg/L/96 hr; semistatic bioassay based on OECD 204[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p. 70 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value

ETXV - ECOTOXICITY VALUES	LC50 Oncorhynchus mykiss (Rainbow trout) 2-2.5 g fingerlings: 3-5 mg/L/96 hr; static bioasay; Conditions: Temp: 15 deg C, Dissolved oxygen 10.2 mg/L, Hardness 230 mg CaCO3/L, pH 8.4[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p. 70 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Brachydanio rerio 9.9 mg/L/96hr; static bioassay[European Chemicals Bureau; IUCLID Dataset, 4, 4-isopropylidenediphenol (CAS # 80-05-7) p.34 (2000 CD-ROM edition). Available from, as of November 12, 2007: http://esis.jrc.ec.europa.eu/] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	LC50 Cyprinodon variegatus (Sheepshead minnow) 7.5 mg/L/96 hr /Conditions of bioassay not specified in source examined/[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p. 69 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
ETXV - ECOTOXICITY VALUES	EC50 Acartia tonsa (copepod) 0.55 mg/L/5 days; semi-static; Effect: larval development rate[European Chemicals Bureau; European Union Risk Assessment Report, 4,4-Isopropylidenediphenol (Bisphenol-A) (CAS# 80-05-7) p.78 (2003).] **PEER REVIEWED**

Result Group

Component Name	Value
NTP - NATIONAL TOXICOLOGY PROGRAM STUDIES	Bisphenol A (BPA) was examined in the Reproductive Assessment by Continuous Breeding protocol using Swiss mice. Continuous exposure to BPA for 2 wks via sc Silastic® implants containing 0, 6.25, 12.5, 25, 50 or 100 mg BPA during Task 1 (dose range-finding study) caused no overt toxicity, but did seem to incr the weight of the reproductive tract in high dose females. Although this incr in reproductive tract weight was not statistically significant, it suggested possible estrogenic activity of the test chemical. Therefore, dose levels of 0, 25, 50 & 100 mg of BPA, given via sc Silastic® implants, were selected for Task 2 (continuous breeding). During Task 2 several animals in each treatment group expelled their implants through cutaneous lesions that developed directly over the implants or at the site of the initial incision. When this occurred, animals were reimplanted with Silastic® tubing containing the original amount of BPA; several animals received new implants on three different occasions during Task 2. Although some of the reproductive parameters measured during Task 2 differed significantly among treatment groups, these differences appeared to be due to chance alone. Because the Silastic® implants tended to be expelled & since they appeared to release too little BPA to cause generalized or reproductive toxicity, the present study was terminated at the conclusion of Task 2. Under the conditions of this study, no effects of BPA on fertility & reproduction in male & female CD-I mice were observed. Further studies at higher doses & by other means of admin are required to investigate the reproductive toxicity of BPA.[Department of Health & Human Services/National Institute of Environmental Health Sciences, National Toxicology Program; Bisphenol A: (CAS No. 80-05-7) Reproduction and Fertility Assessment in CD-1 Mice When Administered Via Subcutaneous Silastic® Implants, NTP Study No. RACB82081 (January 1984) Available from, as of August 14, 2002: http://ntp.niehs.nih.gov/index.cfm?objectid=0847F35A-0850-D1E7-B02ED4DDD150F990] **PEER REVIEWED**

Result Group

Component Name	Value
NTP - NATIONAL TOXICOLOGY PROGRAM STUDIES	Bisphenol A (BPA) ... was tested for its effects on reproduction & fertility in CD-1 mice, following the standard NTP protocol. Data on body weights, clinical signs, & food & water consumptions were collected during the dose-range-finding phase (Task 1), & used to set exposure concns for Task 2 at 0.0, 0.25, 0.5, & 1.0% in feed. For females, feed consumption dropped by 19% for the medium dose group & by 23% for the high dose group. These concns produced estimated daily intakes of nearly equal to 437, 875, & 1750 mg/kg/day. For the continuous cohabitation phase (Task 2), the mean number of litters/pair dropped by 5% (at 0.5% BPA) & by 9% (at 1.0% BPA), while the number of live pups/litter dropped by 20% at the medium dose & by 48% at the high dose. Pup weight adjusted for litter size was unchanged. Postpartum dam weights were reduced only at the high dose, by nearly equal to 8-9%. Interestingly, cumulative days to litter increased by up to 10% for the high dose group. Mice from the last litter in all three dose groups & controls were reared by their dams until weaning, when they were fed BPA at the same concn received by their parents. The reductions in litter size spurred the conduct of a Task 3 crossover mating trial of the F0 mice to determine the affected sex. In the treated male X control female group, there were 25% fewer pups (compared to the control X control group). The number of live pups in the treated female X control male group was reduced by 51%. Pup weight & viability were not affected. After the Task 3 litters were delivered & evaluated, the F0 mice from the control & 1% BPA groups were killed & necropsied. Male body weight was unchanged, while liver & kidney weights increased by 29% & 16%. Seminal vesicle weight was reduced by 19%, while sperm motility dropped by 39% in the high dose animals. Female body weights in the 1% BPA group were reduced by 4%, while adjusted liver & kidney weights were reduced by 27% & 10%, respectively. For the second generation animals, weaning weights were equivalent across groups, but pup mortality before weaning was significantly increased at 1% BPA. Adult body weight at the time of mating was unaffected at any dose in either sex. F1 mice were mated within treatment levels. There was no effect on mating or fertility indices, or on the number of live pups/litter, the proportion born alive, or the adjusted live pup weight. After the F2 pups had been evaluated & discarded, the F1 adults were killed & necropsied. Male body weight was not affected, while adjusted liver weights were increased by 7%, 7%, & 29% (low to high doses, respectively). Male kidney weights adjusted for body weight were increased by 16%, 20%, & 20%. Right epididymal weight was reduced by 7%, 16%, & 18%. Seminal vesicles weight was reduced by 11% & 28% at the low & high dose levels, respectively. The 10% reduction at the middle dose level did not reach statistical significance. For females, body weight was not affected, while body-weight-adjusted liver weights were increased by 6%, 13%, & 20%, & kidney weights were increased by 13%, 15%, & 13%. None of the sperm endpoints measured were significantly affected in a dose-dependent manner. Although sperm count was reduced dose-dependently, to a max of 18% less than controls, this reduction did not reach statistical significance. In summary, exposure of the first generation mice to 0.5% or 1.0% resulted in a reduction in number of litters/pair, live pups/litter, & live pup weight. At the high dose, this occurred in the presence of increases in liver & kidney weights. The second generation did not appear more sensitive than the first to the reproductive toxicity of Bisphenol A.[Department of Health & Human Services/National Institute of Environmental Health Sciences, National Toxicology Program; Bisphenol A: (CAS No. 80-05-7) Reproduction and Fertility Assessment in CD-1 Mice When Administered in the Feed, NTP Study No. RACB84080 (May 1985) Available from, as of August 14, 2002: http://ntp.niehs.nih.gov/index.cfm?objectid=0847F35A-0850-D1E7-B02ED4DDD150F990] **PEER REVIEWED**

Result Group

Component Name	Value
NTP - NATIONAL TOXICOLOGY PROGRAM STUDIES	Bisphenol A (BPA) ... was evaluated for toxic and teratogenic effects in timed-pregnant Sprague Dawley CD rats (n=27 to 29). Bisphenol A (0, 160, 320, 640 and 1280 mg/kg/day) suspended in corn oil was given by gavage (5.0 mL/kg body weight) daily on gestational days (gd) 6 through 15. Females were weighed and observed daily. At sacrifice a total of 18 to 29 confirmed-pregnant females per treatment group were evaluated. The gravid uterus of each dam was weighed, and the number of implantation sites and live, dead, or resorbed fetuses were recorded. All live fetuses were weighed and examined for external, visceral, and skeletal malformations. ... Maternal mortality was 0% for all but the 1280 mg/kg/day dose group, which was 26%. Due to this high mortality, data from the 1280 mg/kg/day group will not be further considered in this summary. Maternal body weight on gestational day 0 and gestational day 6 did not differ among the remaining dose groups. But at gestational day 11 and 15, maternal body weight was lowered for all Bisphenol A treatment groups. Gravid uterine weight, absolute maternal liver weight, and relative maternal liver weight were unaffected by treatment. Bisphenol A produced no significant fetal effects at doses of 640 mg/kg. In conclusion, Bisphenol A in rats was not a developmental toxicant at doses that were maternally toxic. The developmental NOAEL was 640 mg/kg. A maternal NOAEL was not established, based on effects on maternal body weight; the LOAEL for maternal body weight effect in this study was 160 mg/kg.[Department of Health & Human Services/National Institute of Environmental Health Sciences, National Toxicology Program; Teratologic Evaluation of Bisphenol A: (CAS No. 80-05-7) Administered to CD Rats on Gestational Days 6 Through 15, NTP Study No. TER85051 (February 15, 1985) Available from, as of August 14, 2002: http://ntp.niehs.nih.gov/index.cfm?objectid=0847FF31-90CC-C685-88B4D7EAC975BD44] **PEER REVIEWED**

Result Group

Component Name	Value
NTP - NATIONAL TOXICOLOGY PROGRAM STUDIES	Bisphenol A (BPA), ... was evaluated for toxic and teratogenic effects on timed-pregnant Swiss ICR CD-I mice. Bisphenol A (O, 500, 750, 1000, and 1250 mg/kg/day) suspended in corn oil was given by gavage (10.0 ml/kg body weight) daily on gestational days (gd) 6 through 15. Timed-pregnant dams (n= 29-33/group) were sacrificed 1 day prior to parturition, the uterine contents were examined, and all fetuses were examined for external, visceral, and skeletal malformations. ... Maternal mortality occurred at all bisphenol A doses: 7.1%, 3.6%, 6.3%, and 18.2% for the low through high dose groups, respectively. Maternal body weight on gestational day 0, gestational day 6, and gestational day 11 did not differ among dosed groups. Maternal body weight was decreased in the 1250 mg/kg/day dose group on gestational days 15 (by 10%) and 17 (by 16%). Gravid uterine weight was depressed in the 1250 mg/kg/day dose group by 32%. Weight gain corrected for gravid uterine weight was not affected by bisphenol A . Relative maternal liver weight (i.e., corrected for body weight) was increased at all doses (by 9%, 13%, 17%, and 25% respectively). There was a significant increase in the percentage of resorptions per litter at the high dose from a control value of 14%, to 40%. Malformation incidence was not altered by bisphenol A . There was a 13-15% decrease in individual fetal weight, seen only at the high dose. Bisphenol A treatment at maternally toxic dose levels produced fetal toxicity but did not alter fetal morphologic development. Based on mortality at all doses, no NOAEL was established for dams. The NOAEL for fetal malformations is 1250 mg/kg/day.[Department of Health & Human Services/National Institute of Environmental Health Sciences, National Toxicology Program; Teratologic Evaluation of Bisphenol A (CAS No. 80-05-7) Administered to CD-1 Mice on Gestational Days 6 Through 15, NTP Study No. TER85052 (February 15, 1985) Available from, as of August 14, 2002: http://ntp.niehs.nih.gov/index.cfm?objectid=0847FF31-90CC-C685-88B4D7EAC975BD44] **PEER REVIEWED**

Result Group

Component Name	Value
NTP - NATIONAL TOXICOLOGY PROGRAM STUDIES	A carcinogenesis bioassay of bisphenol A, an intermediate used in the manufacture of epoxy, polycarbonate, and polyester-styrene resins, was conducted by feeding diets containing 1,000 or 2,000 ppm of the test chemical to groups of 50 F344 rats of either sex, 1,000 or 5,000 ppm to groups of 50 male B6C3F1 mice, and 5,000 or 10,000 ppm to groups of 50 female B6C3F1 mice for 103 weeks. Groups of 50 rats and 50 mice of either sex served as controls. Mean body weights of rats of either sex and of high- and low-dose female mice and high-dose male mice were lower than those of the controls throughout the study. Since food consumption of dosed female rats was only 70% to 80% that of the controls throughout most of this study, reduced body weight gain was probably due to reduced food consumption. Food consumption by dosed male rats was 90% that of controls. Food consumption among all groups of mice appear to be similar. Leukemias occurred at increased incidences in dosed rats of both sexes. In male rats, the dose-related (13/50, 12/50, 23/50) trend was statistically significant (P=0.021) by a Cochran-Armitage test, but neither the trend nor the increase in the high-dose group was significant by life table analyses, which adjust for survival differences among groups. The increased incidences in dosed female rats were also not statistically significant (7/50, 13/50, 12/50). Interstitial-cell tumors of the testes occurred at statistically significant incidences in low- and high-dose male rats; however, since this lesion normally occurs at a high incidence in aging F344 male rats, the increased incidence observed in this study was not considered compound related (35/49, 48/50, 46/49). In male mice, there was an increased incidence of leukemias or lymphomas (2/49, 9/50, 5/50), but this increase was not statistically significant. A compound-related increased incidence of multinucleated giant hepatocytes was observed in male mice (1/49, 41/49, 41/50), but there was no increase of liver tumors in male mice. The marginally significant increase in leukemias in male rats, along with an increase (not statistically significant) in leukemias in female rats and a marginally significant increase in the combined incidence of lymphomas and leukemias in male mice, suggests that exposure to bisphenol A may be associated with increased cancers of the hematopoietic system. A statistically significant increase in interstitial-cell tumors of the testes in male rats was also suggestive of carcinogenesis, but was not considered to be convincing evidence of a compound-related effect because this lesion normally occurs at a high incidence in aging F344 rats. Under the conditions of this bioassay, there was no convincing evidence that bisphenol A was carcinogenic for F344 rats or B6C3F1 mice of either sex.[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) (1982) Technical Rpt Series No.215 NIH Pub No. 82-1771. Available from, as of November 13, 2007: http://ntp-server.niehs.nih.gov/] **PEER REVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in groups of male and female beagle dogs (4/sex/concn level) ingesting bisphenol-A via the diet for 90 days at nominal concentrations of 1000, 3000 and 9000 ppm. Parameters such as general behavior and appearance, ophthalmoscopy, body weights, food consumption, hematological and biochemical studies or urinalysis, were not consistently affected by the treatment. No compound related gross pathologic lesions were observed in any of the dogs in the treated groups. A group mean relative liver weight increase at the 9000 ppm concentration level was regarded as compound related.[International Research and Development Corporation; 90 Day Oral Toxicity Study in Dogs, (1976), EPA Document No. 40-8486013, Fiche No. OTS0509954] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic inhalation toxicity was evaluated in groups of male and female Charles River CD rats (10/sex/concn level) ingesting bisphenol-A via the diet for 90 days at nominal concentrations of 100, 250, 500, 750 and 1000 ppm. In the male group given 1000 ppm there was a slight decrease in body weight when compared to the control group. Food consumption values were slightly higher for treated female rats than for female control rats. Other parameters of general behavior, appearance and survival of the treated F0 parents were not consistently affected by the treatment. At 100 days of age F0 parents were mated to produce F1 offspring. 15 Male and 15 female F1 rats were treated via the diet with bisphenol-A for 90 days. Body weight gains of the F1 male rats were slightly lower at the 750 ppm concn level. Other parameters such as appearance, survival, male and female fertility indices, female estrous cycles, length of gestation period, number of pups/litter, and pup body weights were not consistently affected by the treatment.[International Research and Development Corporation; Reproduction and Ninety Day Feeding Study in Rats, (1978), EPA Document No. 40-8486013, Fiche No. OTS0509954] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in weanling rats (f1) obtained from the mating of Charles River CD rats fed biphenol-A in the diet during their growth and reproductive period. Groups of male and female rats (10/sex/concn level) ingested bisphenol-A via the diet for 90-days at nominal concentrations of 1000, 3000 and 9000 ppm. In the F0 generation, body weight gain was slightly decreased at the 3000 ppm concn level, and moderately decreased at the 9000 ppm level. Other parameters such as, general behavior, food consumption, appearance, ophthalmoscopy or hematological, biochemical, urinalysis studies, fertility indices, number of pups/litter and pup survival were not consistently affected by the treatment. At the age of 100 days, the F0 rats were mated 1 to 1, and subsequently the offspring (F1) rats were initiated on the 90-day feeding study of bisphenol-A. Reproductive effects were evaluated using 15 male and 15 female rats per concn level (1000,3000 or 9000 ppm). in the F1 generation, slight reductions in body weight (at 21 days of age) were noted for pups at the 3000 and 9000 ppm levels. Body weight gain was moderately decreased for female rats at 1000 ppm, and for male and female rats at the 3000 and 9000 ppm levels. food consumption also decreased for male rats at the 9000 ppm level and for all treated females. Other parameters as mentioned above were not consistently affected by the treatment.[International Research and Development Corporation; Reproduction and Ninety Day Oral Toxicity Study in Rats, (1976), EPA Document No. 40-8486013, Fiche No. OTS0509954] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Bisphenol A was examined for mutagenic activity in agar overlay cultures and liquid suspension cultures of Salmonella typhimurium, strain TA-1538, Escherichia coli, strain WP2 and WP2 uvrA, and in liquid cultures of Saccharomyces cerevisiae, strain JD1. Assays were performed in the presence and absence of added metabolic activation by Aroclor-induced rat liver S-9 fraction. None of the bacterial cultures tested from 0.1 - 1.0mg/ml in liquid cultures and from 0.2 - 500ug/plate in agar cultures produced an increase in the reversion frequency relative to the controls. Yeast cultures tested at concentrations of 0.01, 0.1 and 0.5mg/ml did not cause an increase in the frequency of mitotic gene conversion relative to the controls.[Shell Toxicology Laboratory (Tunstall); Toxicity Tests with Diphenylol Propane (DDP): In Vitro Mutation Studies, (1978), EPA Document No. 878214488, Fiche No. OTS0206596] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	The ability of Bisphenol A to cause chromosome aberrations was evaluated in a cultured epithelial cell line (RL1) of the Carworth Farm E rat. Based on preliminary toxicity determinations, monolayer cultures were treated with 0, 10, 20, 25 and 30ug/ml and incubated for 21 hours prior to the addition of colcemid. Chromosome changes were analyzed in 100 cells from each culture. The incidence of chromosome damage in the treated cultures did not differ from the negative control (DMSO).[Shell Toxicology Laboratory (Tunstall); Toxicity Tests with Bisphenol A: In Vitro Mutation Studies, (1978), EPA Document No. 878214488, Fiche No. OTS0206596] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	The fate of bisphenol A was evaluated in male Carworth Farms-Elias rats ingesting 14C-bisphenol A via gavage in a single dose of 800mg/kg. The 14C-metabolites were evaluated daily in the pooled urine and feces of 4 treated rats per study for 8 days. Two studies were performed, in which the majority of the administered dose was excreted in 24 hours while in the third study, almost equal amounts of the administered dose was excreted at 24 and 48 hours post treatment. An average of 28% of the administered dose was excreted in the urine and 56% in the feces. Total recoveries of the labeled averaged 88%. Evaluation of the 14C-content in carbon dioxide collected from six treated animals placed in a metabolic chamber over a four hours period, disclosed no evidence of radioactivity.[Mellon Institute of Industrial Research; The metabolism of Bisphenol A in the Rat, (1962), EPA Document No. 8778214659, Fiche No. OTS0206612] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in one group of 10 Sherman rats (5 male and 5 female) ingesting diphenylol propane in the diet at levels of 0.002, 0.008, 0.03, 0.15 and 0.52 gm/kg body weight/day for 90 days. The test article did not induce statistically significant (test type not reported) changes in mortality, appetite, weight gain, body length, fatness, liver and kidney weights, and microscopic tissue pathology of the small intestine, kidney, liver, spleen, and testes at any dose level.[Mellon Institute of Industrial Research; The Acute and Subacute Toxicity of Diphenylol Propane (1948), EPA Document No. 878214657, Fiche No. OTS0206612] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in four groups of 2 beagle dogs (1 male and 1 female) ingesting bisphenol A via the diet at levels of 2000, 4000, 8000 or 12000 ppm for 14 days. Mortality was not observed during the study and all animals were sacrificed after 14 days. The test article did not induce changes in general appearance and behavior, body weight, or food consumption. Slight focal mucosal congestion and hemorrhage of the gastrointestinal tract was reported in treated animals, however, these effects were also occasionally observed in controls.[International Research and Development Corporation; Fourteen Day Range Finding Study in Dogs (1976), EPA Document No. 878214680, Fiche No. OTS0206618] **UNREVIEWED**

Result Group

Component Name	Value

TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in groups of 8 beagle dogs (4 male and 4 female) ingesting bisphenol-A via the diet at levels of 1000, 3000, or 9000 ppm for 90 days. Mortality was not observed at any dose level and animals were sacrificed after 90 days. The test article did not induce changes in general behavior and appearance, ophthalmological parameters, body weight, food consumption, hematological and biochemical parameters, or urinalysis values at any dose level. Bisphenol-A did not induce compound related gross pathologic lesions at any dose level, and lesions were not observed on microscopic analysis of the following tissues from high dose group animals: adrenals, aorta, brain, esophagus, eye (+ optic nerve), gallbladder, duodenum, jejunum, ileum, cecum, colon, rectum, urinary bladder, kidneys, liver, lungs, mesenteric lymph node, skin, nerve, skeletal muscle, spleen, pancreas, pituitary, prostrate/uterus, bone marrow, salivary gland, spinal cord, stomach, testis/ovary, thymus, thyroid/parathyroid, and tongue. A group mean relative liver weight increase observed at the 9000 ppm dose level was considered to be compound related. Statistical analyses were not reported.[International Research and Development Corporation; Ninety Day Oral Toxicity Study in Dogs (1976), EPA Document No. 878214682, Fiche No. OTS0206618] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic toxicity was evaluated in groups of 10 Charles River CD rats (5 male and 5 female) ingesting bisphenol-A via the diet at dosage levels of 2000, 4000, 8000, or 12000 ppm for 14 days. Mortality was not observed at any dose level and rats were sacrificed after 14 days. Slight to moderate dose related decreases in body weight gain were observed in male rats at the 4000, 8000 and 12000 ppm dosage levels; very slight decreases were observed in females at the 8000 and 12000 ppm levels. Food consumption was slightly lower in males in the 8000 and 12000 ppm groups as compared to males in the 2000 and 4000 ppm groups. The test article did not induce changes in general behavior and appearance at any dose level, while compound related gross pathologic lesions were not observed on necropsy of animals in any dose group. Statistical analysis was not reported.[International Research and Development Corporation; Fourteen Day Range Finding Study in Rats (1976), EPA Document No. 878214679, Fiche No. OTS0206618] **UNREVIEWED**

Result Group

Component Name	Value
TCAT - TSCA TEST SUBMISSIONS	Subchronic inhalation toxicity was evaluated in groups of 40 Fischer 344 rats (20 male, 20 female) receiving nine 6 hour whole body exposures to bisphenol-A at nominal concentrations of 0, 10, 50 or 150 mg/m3 over a period of 2 weeks. Mortality was not observed at any concentration level. Following sample collection, half of the male and female rats were sacrificed immediately, and half after a 29 day recovery period. Clinical observations during the exposure period included porphyrin like material around the nose in males exposed to 50 or 150 mg/m3, and perineal soiling in females exposed to 150 mg/m3. Body weights of males exposed to 150 mg/m3 were statistically significantly (Bartletts test, p < 0.01) decreased during the exposure period, but were within normal limits one week following exposure. The test article did not induce changes in hematology parameters, clinical blood chemistry, or urinalysis data at any dose level. Histological examination of rats sacrificed immediately after treatment revealed minor inflammation of the epithelial lining of the nasal cavity in males exposed to 150 mg/m3, and in females exposed to 50 or 150 mg/m3. Very slight to slight hyperplasia of squamous epithelium in the nasal cavity was observed in males and females exposed to 50 or 150 mg/m3. All treatment related changes were reversible within the 29-day recovery period.[Dow Chemical Company; Bisphenol A: 2-Week Aerosol Toxicity Study With Fischer 344 Rats, (1985), EPA Document No. 40-8586071, Fiche No. OTS0510007] **UNREVIEWED**

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	When administered as a single dose by gavage to male CFE rats, 28% of the (14)C-labeled bisphenol A was excreted in the urine (primarily as the glucosamide) and 56% in the feces (20% as free bisphenol A, 20% as a hydroxylated bisphenol A, and the rest as an unidentified conjugate). No carbon-labeled residues were detected in animals killed after 8 days.[DHHS/NTP; Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F1 Mice (Feed Study) p. 1 (1982) Technical Rpt Series No. 215 NIH Pub No. 82-1771] **PEER REVIEWED**

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Toxicokinetics of radiolabeled (14C) bisphenol A was studied in the common frog (Rana temporaria) at two experimental temperatures (7 and 19 deg C). The growth rate of the tadpoles during the 96-hr experiment was very slow at 7 deg C, but the weight of tadpoles almost tripled at 19 deg C. At all tested exposure concentrations (0.2, 1.5, 10, and 100 ug/L), conditional uptake rate constants (ku) were 69 to 82%, and elimination rates (ke) 79 to 90% lower, at 7 deg C than at 19 deg C. On the contrary, bioconcentration factors (BCFs) were higher at 7 deg C than at 19 deg C. Total accumulated bisphenol A per individual was higher at 19 deg C, which is in agreement with higher ku at 19 deg C. Exposure concentrations did not have any constant effect on BCFs at the two temperatures. The results of the current experiment suggest that higher temperature increases uptake and total amount of chemical in frog tadpoles but does not necessarily lead to higher BCFs. High temperature may have increased the growth rate more than the uptake rate, resulting in a net dilution of bisphenol A in tadpole tissues. The observed difference in BCFs also could be a result of temperature-induced changes in allometric relationships (increased surface area to volume ratio) and/or more effective elimination in more developed tadpoles at high temperature.[Honkanen JO, Kukkonen JVK; Environ Toxicol Chem 25 (10): 2804-8 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	The toxicokinetics of bisphenol A (BPA) in F344 rats, cynomolgus monkeys and chimpanzees /were examined/. Serum BPA levels were quantified using the LC-MS/MS method. After oral administration at 10 mg/kg, the maximum concentration in the serum (C(max)) and the area under the serum concentration curve (AUC) of BPA in cynomolgus monkeys and chimpanzees were greater than in rats. After oral administration at 100 mg/kg, AUC during the first 4hr (AUC(0-->4hr)) in cynomolgus monkeys was greater than in rats. In rats, the serum BPA levels were increased again 6hr or later after oral administration at each dose, which suggested the enterohepatic circulation of BPA in rats. After subcutaneous administration at 10 mg/kg, the AUCs were ranked in the following order: cynomolgus monkeys>chimpanzees>rats, and C(max) in cynomolgus monkeys was greater than in rats and chimpanzees. After subcutaneous administration at 100 mg/kg to cynomolgus monkeys and rats, both the C(max) and AUCs in cynomolgus monkeys were greater than in rats. In all species, the oral administration of BPA resulted in much lower C(max) and AUCs than subcutaneous administration at the corresponding doses, indicating the low bioavailability of oral administration. This result suggests that BPA undergoes an extensive first-pass metabolism in these animal species. AUCs of subcutaneous administration and the AUC (0-->4hr) of oral administration in the two primates were greater than that in rats. Because the systemic clearance for BPA is assumed to be dependent on the hepatic blood flow-rate, the high AUCs in primates are considered to be due to the lower systemic clearance by a lower hepatic blood flow-rate in primates than in rats. In addition, the toxicokinetics of the metabolites of BPA were examined. After the oral administration of 10 mg/kg BPA, both C(max) and AUCs of BPA metabolites were ranked in the following order: cynomolgus monkeys>chimpanzees>rats, and the terminal elimination half-life (T(1/2)) in rats was greater than that in cynomolgus monkeys and chimpanzees, suggesting the enterohepatic circulation of BPA in rats. From these results, the systemic clearance of BPA in primates is considered to be close to that in humans due to the similarity of the hepatic blood flow-rate. Furthermore, the major elimination route of BPA metabolites in primates is assumed to be renal excretion, as in humans, because the enterohepatic circulation that was observed in rats was not observed. In conclusion, primates are thought to be served as a valuable surrogate model for the toxicokinetics of BPA in humans.[Tominaga T et al; Toxicology 226 (2-3): 208-17 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	This study describes the maternal-fetal disposition of bisphenol A and its distribution into the placenta and amniotic fluid after iv injection (2 mg/kg) to pregnant Sprague-Dawley rats. Bisphenol A was distributed extensively to the placenta and fetus, with their respective AUC values 4.4- and 2.2-fold greater than AUC for the maternal serum. In contrast, the distribution of bisphenol A into the amniotic fluid was low, with the mean amniotic fluid-to-maternal serum AUC ratio of 0.2. The decay curves of bisphenol A in the placenta, fetus, and amniotic fluid paralleled that of the maternal serum during the terminal elimination phase. A five-compartment open model consisting of the maternal central, maternal peripheral, placental, fetal, and amniotic fluid compartments was used to describe the disposition of bisphenol A in pregnant rats, with the elimination occurring from the maternal central and fetal compartments. Based on this model, bisphenol A delivered to the placenta was transferred primarily to the fetus [kpf/(kpf + kpc + kpa) = 65.4 %], with the remaining fraction transported to the maternal central (33.2%) and amniotic fluid (1.4%) compartments. Bisphenol A was eliminated from the amniotic fluid by the fetal (63.9%) and placental (36.1%) routes. On the other hand, bisphenol A was eliminated from the fetus primarily by the placental route back to mother [kfp/(kfp + kfa + kfo) = 100%], with the amniotic route playing an insignificant role in fetal elimination. The percent contribution of the fetal elimination to the total elimination in the maternal-fetal unit was 0.0% [CLfoAUCfetus/(CLcoAUCmaternal serum + CLfoAUCfetus)].[Shin BS et al; J Toxicol Environ Health A 65 (5-6): 395-406 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Bisphenol A (BPA), an estrogenic endocrine disrupting chemical, has been reported to affect embryos and alter their postnatal development. In the present study, we measured the concentrations of BPA in human colostrum by a competitive enzyme-linked immunosorbent assay (ELISA) with the aim of understanding the present status of BPA burden in human breast milk in Shizuoka, Japan. Human colostral samples were collected from 101 healthy mothers within three days after delivery. The BPA concentrations of colostral samples were estimated by ELISA after the acetonitrile extraction and solid phase extraction column purification. BPA in 101 samples was detected in the concentration range of 1-7 ng/mL. The mean concentration of BPA was 3.41 +/- 0.13 (mean +/- SD) ng/mL.[Kuruto-Niwa R et al; Chemosphere 66 (6): 1160-4 (2007)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... The disposition and transplacental transfer of bisphenol A (BPA) in pregnant DA/Han rats on day 18 of gestation /were examined/. The BPA concentrations were determined by GC/MS analysis in maternal blood, maternal organs (liver, kidney, uterus), placenta and fetuses (fetal liver and residual tissues) at different time-points (5-360 min) after intravenous administration of 10 mg BPA/kg body weight. Total BPA (aglycone and conjugates) was analyzed in all tissue samples after enzymatic hydrolysis and liquid/liquid extraction; in maternal plasma, total BPA and BPA aglycone were analyzed in parallel samples (with/without hydrolysis). Soon (5 min) after the i.v. injection a mean total BPA concentration of 3.8 ug/mL was found in maternal plasma; it declined in the first 2 hr to 0.7 ug/mL. Early after injection, the majority of circulating BPA (almost 80%) was still in the aglycone form, but, metabolism by phase II enzymes decreased the BPA aglycone concentration to 0.3 ug/mL after 2 hr. Despite this efficient conjugation, BPA was rapidly distributed in the organism: In well perfused organs peak concentrations for total BPA were attained 20-30 min after intravenous administration, with mean values of about 9.7 ug/g in maternal liver, 8.6 ug/g in kidneys, and 6.2 ug/g in the uterus. The peak values in other tissues were lower, with 4.0 ug/g for placenta, 3.3 ug/g for fetal liver, and 2.4 ug/g for residual fetus homogenate. The BPA levels in all tissues thereafter declined more or less in parallel with those in maternal blood. The rather similar concentration time course in placenta and fetal liver indicates that BPA is readily transferred across the placenta of DA/Han rats to the fetus.[Moors S et al; Arch Toxicol 80 (10): 647-55 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	To study absorption, distribution, excretion, and metabolism of bisphenol A (BPA), BPA labeled with carbon-14 was administered po to male and female Fischer (F344) rats at relatively low doses (20, 100, and 500 ug/kg), and iv injected at 100 and 500 ug/kg. 14C-BPA (500 ug/kg) was also administered orally to pregnant and lactating rats to examine the transfer of radioactivity to fetuses, neonatal rats, and milk. Radioluminographic determination using phosphor imaging plates was employed to achieve highly sensitive determination of radioactivity. Absorption ratios of radioactivity after three oral doses were high (35-82%); parent 14C-BPA in the circulating blood was quite low, however, suggesting considerable first-pass effect. After an oral dose of 100 ug/kg 14C-BPA, the radioactivity was distributed and eliminated rapidly, but remained in the intestinal contents, liver, and kidney for 72 hr. The major metabolite in the plasma and urine was BPA glucuronide, whereas most of the BPA was excreted with the feces as free BPA. A second peak in the time-course of plasma radioactivity suggested enterohepatic recirculation of BPA glucuronide. There was limited distribution of 14C-BPA to the fetus and neonate after oral administration to the dam. Significant radioactivity was not detected in fetuses on gestation days 12 and 15. On day 18, however, radioactivity was detected in the fetal intestine and urinary bladder 24 hr after oral dosing of 14C-BPA to the pregnant rats. Part of radioactivity was transferred to neonatal rats from the milk of the treated lactating dam and remained in the intestine of the neonates after 24-hr nursing by an untreated dam.[Kurebayashi H et al; Arch Toxicol 79 (5): 243-52 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Bisphenol A (BPA) and nonylphenol (NP) /were measured/ in archived urine samples from a reference population of 394 adults in the United States using isotope-dilution gas chromatography/mass spectrometry. The concentration ranges of BPA and NP were similar to those observed in other human populations. BPA was detected in 95% of the samples examined at concentrations > or = 0.1 ug/L urine; the geometric mean and median concentrations were 1.33 ug/L (1.36 ug/g creatinine) and 1.28 ug/L (1.32 ug/g creatinine), respectively; the 95th percentile concentration was 5.18 ug/L (7.95 ug/g creatinine). NP was detected in 51% of the samples examined > or = 0.1 ug/L. The median and 95th percentile concentrations were < 0.1 ug/L and 1.57 ug/L (1.39 ug/g creatinine), respectively.[Calafat AM et al; Environ Health Perspect 113 (4): 391-5 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	The distribution of 14C-bisphenol A (BPA) in plasma and neuroendocrine organs was determined in Fischer 344 female rats following three oral doses (0.1, 10 or 100 mg/kg). Plasma and tissue maximum concentrations (Cmax) were reached within 15-30 min of dosing. Plasma areas-under-the-curve (AUC) ranged from 0.06 to 53.9 ug-hr/mL. The AUCs of the pituitary gland and uterus/gonads were 16-21% higher than that of plasma. The AUCs of hypothalamus and the rest of the brain were 43.7% and 77% of the plasma AUCs, respectively. In the brain tissue, the exposure increased linearly with the oral dose, as the dose was increased from 0.1 to 10 and 100 mg/kg; the exposure in the brain relative to the plasma increased by factors of 1, 1.19 and 1.24. This indicates that the brain barrier systems do not limit the access of the lipophilic BPA to the brain. The increases of the uterus/gonads relative to the plasma were 1, 1.07 and 1.04. Tissue partitioning was also examined in vitro by the uptake of 14C-BPA. The BPA tissue/blood partition coefficients were as follows: heart, 7.5; liver, 6.1; kidney, 6.4; fat, 3.6; muscle, 2.6; breast, 3.6; ovaries, 9.1; uterus, 5.9; stomach, 5.1; and small intestine, 6.7. The tissue/cerebrospinal fluid partition coefficients were as follows: pituitary gland, 12.8; brain stem, 6.1; cerebellum, 6.4; hippocampus, 7.1; hypothalamus, 6.1; frontal cortex, 4.9; and caudate nucleus, 6.8.[Kim CS et al; Toxicol Ind Health 20 (1-5): 41-50 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... The toxicokinetics of bisphenol A (BPA) among three animal species: rats, cynomolgus monkeys and chimpanzees /were compared/. Rats and monkeys were administered BPA orally or subcutaneously at 10 or 100 mg/kg body weight, while chimpanzees were administered only 10 mg/kg of BPA. BPA in serum was measured by ELISA. In oral administration of BPA at 10 mg/kg, both C(max) and AUC were rats < chimpanzee < monkeys. In oral administration of BPA at 100 mg/kg, both C(max) and AUC were rats < monkeys. Subcutaneous BPA administrations also revealed similar results, although the values of toxicokinetic parameters in subcutaneous administration were higher than those in oral administration. These results suggest that orally or subcutaneously administered BPA in primates is more easily absorbed than that in rats.[Negishi T et al; Exp Anim 53 (4): 391-4 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... Blood samples from mothers (n = 37) between weeks 32 and 41 of gestation and after the births, placental tissue and umbilical cord blood from the same subjects /were analyzed for bisphenol A (BPA)/. Concentrations of BPA ranged from 0.3 to 18.9 ng/mL (median = 3.1 ng/mL) in maternal plasma, from 0.2 to 9.2 ng/mL (median = 2.3 ng/mL) in fetal plasma, and from 1.0 to 104.9 ng/g (median = 12.7 ng/g) in placental tissue. BPA blood concentrations were higher in male than in female fetuses.[Schonfelder G et al; Environ Health Perspect 110 (11): A703-7 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	The pharmacokinetics of bisphenol A (BPA), including the quantification of the major BPA metabolite BPA-monoglucuronide conjugate (BPA-glucuronide) was studied in Sprague-Dawley rats at different stages of gestation. 14C-BPA was administered orally at 10 mg BPA/kg body weight (0.2 mCi/rat) to nongravid rats and to other groups on gestation days (GD) 6, 14, and 17. GD 0 was when the vaginal smear was sperm positive or a copulatory plug was observed. Radioactivity derived from 14C-BPA was quantified in the maternal blood, selected tissues, and the embryo or fetus. BPA and BPA-glucuronide were quantified in maternal plasma and excreta. Additional rats were dosed orally at 10 mg 14C-BPA/kg (0.2 mCi/rat or 0.5 mCi/rat) on GD 11, 13, and 16 to further study the distribution of BPA and BPA-glucuronide to the embryo/fetal tissue. The tissue distribution, metabolism, or the rates or routes of excretion of BPA, or the plasma concentration-time profiles of BPA-glucuronide did not appear to be altered at any stage of gestation as compared to nonpregnant rats. In the GD 11 group, neither BPA nor BPA-glucuronide was detected in the yolk sacs or embryos, except for trace concentrations of BPA-glucuronide in the yolk sacs at 15 min postdosing. In the GD 13 group, both BPA and BPA-glucuronide were detected in the yolk sacs of the conceptus but not in the embryos/fetuses, except for BPA at 15 min. For the animals dosed with 0.2 mCi/rat on GD 16, both analytes were detected in the placentae at 15 min and 12 hr, but not at 96 hr. Traces of both analytes were detected in fetal tissue in two of five specimens at 15 min only. In rats dosed on GD 16 with 0.5 mCi/rat, the BPA-glucuronide and BPA concentrations in maternal plasma at 15 min were 1.7 and 0.06 ug equivalents (eq)/g plasma, respectively. At the same time postdosing in these animals, the placental BPA-glucuronide concentrations were lower (0.34 ug eq BPA [as glucuronide]/g), and the BPA concentrations were about equivalent (0.095 ug/g). Fetal BPA-glucuronide and BPA concentrations were markedly lower, 0.013 and 0.018 ug eq/g, respectively.[Domoradzki JY et al; Toxicol Sci 76 (1): 21-34 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... The metabolism and toxicokinetics of bisphenol A in humans exposed to low doses /were investigated/ since systemic bioavailability has a major influence on possible estrogenic effects in vivo. Human subjects (three males and three females, and four males for detailed description of blood kinetics) were administered d(16)-bisphenol A (5 mg). Blood and urine samples were taken in intervals (up to 96 hr), metabolites formed were identified by GC/MS and LC-MS/MS and quantified by GC/MS-NCI and LC-MS/MS. d(16)-Bisphenol A glucuronide was the only metabolite of d(16)-bisphenol A detected in urine and blood samples, and concentrations of free d(16)-bisphenol A were below the limit of detection both in urine (6 nM) and blood samples (10 nM). d(16)-Bisphenol A glucuronide was cleared from human blood and excreted with urine with terminal half-lives of less than 6 hr; the applied doses were completely recovered in urine as d(16)-bisphenol A glucuronide. Maximum blood levels of d(16)-bisphenol A glucuronide (approximately 800 nM) were measured 80 min after oral administration of d(16)-bisphenol A (5 mg). The obtained data indicate major species differences in the disposition of bisphenol A. Enterohepatic circulation of bisphenol A glucuronide in rats results in a slow rate of excretion, whereas bisphenol A is rapidly conjugated and excreted by humans due to the absence of enterohepatic circulation. The efficient glucuronidation of bisphenol A and the rapid excretion of the formed glucuronide result in a low body burden of the estrogenic bisphenol A in humans following oral absorption of low doses.[Volkel W et al; Chem Res Toxicol 15 (10): 1281-7 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	This study reports the absolute oral bioavailability and mammary excretion of bisphenol A in rats. The oral bioavailability was determined after administration of relatively low iv (0.1 mg/kg) and oral (10 mg/kg) doses of bisphenol A to rats. After iv injection, serum levels of bisphenol A declined biexponentially, with the mean initial distribution and terminal elimination half-lives being 6.1 +/- 1.3 min and 52.5 +/- 2.4 min, respectively. The systemic clearance (Cls) and the steady-state volume of distribution (Vss) averaged 107.9 +/- 28.7 m/min/kg and 5.6 +/- 2.4 L/kg, respectively. Upon oral administration, the maximum serum concentration (Cmax) and the time to reach the maximum concentration (Tmax) were 14.7 +/- 10.9 ng/mL and 0.2 +/- 0.2 hr, respectively. The apparent terminal elimination half-life of bisphenol A (21.3 +/- 7.4 hr) after oral administration was significantly longer than that after iv injection, indicating the flip-flop of the absorption and elimination rates. The absolute oral bioavailability of bisphenol A was low (5.3 +/- 2.1%). To determine the extent of mammary excretion, bisphenol A was given by simultaneous iv bolus injection plus infusion to steady state at low, medium, and high doses. The steady-state serum levels of bisphenol A were linearly increased with higher dosing rates. The systemic clearance (mean range, 119.2-154.1 mL/min/kg) remained unaltered over the dosing rate studied. The levels of bisphenol A in milk exceeded those in serum, with the steady-state milk to serum concentration ratio being 2.4-2.7.[Yoo SD et al; J Toxicol Environ Health A 64 (5): 417-26 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Bisphenol A (BPA), which is used in the manufacture of polycarbonates, elicits weak estrogenic activity in in vitro and in vivo test systems. The objectives of this study were to compare the patterns of disposition of radioactivity in adult female F-344 and CD rats after oral administration of (14)C BPA (100 mg/kg), to isolate the glucuronide of BPA and to assess its estrogenic activity in vitro, and to evaluate the transfer of radioactivity to pups from lactating dams administered (14)C BPA. Over 6 days, F-344 rats excreted more radioactivity in urine than CD rats. The major metabolite in urine was identified as bisphenol A glucuronide (BPA gluc) by incubation with beta-glucuronidase and (1)H and (13)C NMR spectroscopy. In lactating CD rats administered (14)C BPA (100 mg/kg) by gavage, only a small fraction of the label was found in milk, with 0.95 +/- 0.66, 0.63 +/- 0.13, and 0.26 +/- 0.10 ug eq/mL (mean +/- SD) from dams collected 1, 8, and 26 hr after dosing, respectively. Radioactivity in pup carcasses indicated exposure in the range of microgram equivalents per kilogram; those values ranged from 44.3 +/- 24.4 for pups separated from their lactating dams at 2 hr to 78.4 +/- 10.9 at 24 hr. BPA gluc was the prominent metabolite in milk and plasma. In test systems for activation of in vitro estrogen receptors alpha and beta, BPA gluc did not show appreciable efficacy at concentrations up to 0.03 mM, indicating that metabolism via glucuronidation is a detoxication reaction.[Snyder RW et al; Toxicol Appl Pharmacol 168 (3): 225-34 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Bisphenol A (BPA) is a weak estrogenic compound mass-produced with potential human exposure. Following a single oral or intravenous (iv) dose of 100 ug/kg [ring-14C(U)] radiolabeled bisphenol A (14C-BPA) to male and female cynomolgus monkeys, 79-86% of the administered radioactivity was excreted in urine over 7 days, and most of the urinary excretion was recovered by 24 hr after dosing, a large part of this occurring within 12 hr. The fecal excretion of radioactivity over 7 days was minimal (1.8-3.1%). Toxicokinetic parameters obtained from plasma 14C-BPA-derived radioactivity during 48 hr were C(max) = 104-107 ng-eq/mL between 0.25 and 2 hr, and AUC(oral) = 244-265 ng-eq*hr/mL after oral dosing. In the case of the iv dose, AUC(iv) was 377-382 ng-eq*hr/mL and the bioavailability was 0.66-0.70. The terminal elimination half-life was larger post-iv dose (t(1/2iv) = 13.5-14.7 hr) than post-oral dose (t(1/2oral) = 9.63-9.80 hr). After iv dose, the fast-phase half-life (t(1/2f)) of total radioactivity was 0.61-0.67 hr. The t(1/2f) of unchanged 14C-BPA for females (0.39 hr) was smaller than that for males (0.57 hr). These results suggested the distribution of lipophilic 14C-BPA in adipose tissue after iv dose, in contrast to first pass metabolism after oral dose. 14C-BPA-derived radioactivity was strongly bound to plasma protein (f(p) = 0.055). Radio-HPLC analysis suggested the predominant plasma and urinary metabolites were mono- and diglucuronide of 14C-BPA and unchanged 14C-BPA was very low (< or =1.5%) after oral dose.[Kurebayashi H et al; Toxicol Sci 68 (1): 32-42 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... Groups of DA/Han female rats received 10 mg bisphenol A (BPA)/kg body weight intravenously or 10 or 100 mg BPA/kg body weight orally (by gavage). Blood samples were collected at different time-points and plasma was prepared. Free BPA in the samples was isolated by fluid-fluid extraction. BPA was measured by GC-MS which allowed the reliable determination of BPA concentrations as low as approximately 10 ng/mL plasma. Immediately after iv administration, the BPA plasma concentration was in the range of about 15 ug/mL and decreased rapidly within the first hour (to 700 ng/mL). The levels declined further (100 ng/mL at 2 hr), and after 24 hr the analytical detection limit was reached. BPA was detected in plasma as early as 10 min after gavage administration, indicating rapid initial uptake from the gastrointestinal tract. Absorption of BPA was variable. In animals receiving 10 mg/kg, maximal plasma levels were reached after 1.5 hr (31 ng/ mL) and 6 hr (40 ng/mL). In animals receiving 100 mg/kg, plasma levels reached maxima around 30 min (150 ng/mL) and 3 hr (134 ng/mL) after administration. After 48 hr BPA was at or below the detection limit in both dose groups. Fluctuations in the BPA plasma concentrations over time point to the possibility of enterohepatic recirculation and protracted absorption from the gastrointestinal tract. Using the area under the concentration-time curves (AUCs), low bioavailabilities of 16.4% and 5.6% were calculated for the 10 and 100 mg/kg dose groups, respectively. The toxicokinetic properties of BPA in DA/Han rats are in agreement with the hypothesis of a rapid first-pass elimination by the liver and efficient metabolic clearance of low oral doses. Only excessive doses may lead to bioaccumulation if detoxification pathways are saturated.[Upmeier A et al; Arch Toxicol 74 (8): 431-6 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	Since the ontogeny of glucuronyl transferases (GT) differs with age, the pharmacokinetics of Bisphenol A (BPA) were studied in neonatal animals. (14)C-BPA was administered via gavage at 1 or 10 mg/kg body weight to rats at postnatal day 4, postnatal day 7, postnatal day 21, or to 11 week old adult rats (10 mg/kg dose only). Blood (neonates and adults) and selected tissues (neonates) were collected at 0.25, 0.75, 1.5, 3, 6, 12, 18, and 24 hr postdosing. BPA and BPA-glucuronide in the plasma were quantified by high-performance liquid chromatography; radioactivity in the plasma and tissues was quantified by liquid scintillation spectrometry. The data indicate that neonatal rats at all three ages metabolized BPA to BPA-glucuronide, although an age dependency in the number and concentration of plasma metabolites was observed, consistent with the ontogeny of GT. BPA-glucuronide and BPA concentrations in the plasma were greater in neonates than in adults, except at 24 hr postdosing, suggesting an immaturity in the development of hepatic excretory function in neonatal rats. Nevertheless, the half-lives for the elimination of BPA-glucuronide in plasma were more rapid in neonatal animals than in adults, likely due to reduced microflora beta-glucuronidase activity and an absence of enterohepatic recirculation. A dose dependency in the metabolism and pharmacokinetics of BPA administered to neonates was also observed with nearly complete metabolism of BPA to BPA-glucuronide (94 to 100% of the plasma radioactivity) at a dose of 1 mg/kg. This was in contrast to finding up to 13 different plasma metabolites observed at the 10 mg/kg dose.[Domoradzki JY et al; Toxicol Sci 77 (2): 230-42 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	This study determined the rate- and time-course of bisphenol A (BPA) released from a dental sealant (Delton Opaque Light-cure Pit and Fissure Sealant, Preventive Care/Dentsply) when applied at a dosage of 8 milligrams (one tooth) or 32 mg (8 mg on each of four teeth) to 40 healthy adults. The authors recruited 40 healthy subjects (18 men and 22 women, 20-55 years of age) who did not have histories of pit and fissure sealant placement or composite resin restorations. The authors collected saliva (30 mL) and blood (7 mL) specimens from all subjects immediately before sealant placement (baseline) and at one hour, three hours, one day, three days and five days after sealant placement. They used high-pressure liquid chromatography to determine BPA (detection sensitivity 5 parts per billion, or ppb) in all specimens. The authors detected BPA in some saliva specimens (5.8-105.6 ppb) collected at one hour and three hours. The BPA, however, was not detectable beyond three hours or in any of the serum specimens. For the one- and three-hour saliva samples, the BPA concentration in the high-dose (32 mg) group was significantly greater than in the low-dose (8 mg) group (P < .05, Wilcoxon signed rank test). In the high-dose group, there was a significant decrease in saliva BPA concentrations from one hour to three hours (P < .01, Wilcoxon signed rank test).[Fung FY et al; J Am Dent Assoc 131 (1): 51-8 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	The authors prospectively enrolled 15 men in an exposure assessment study; 14 completed the study. After placement of clinically appropriate amounts of one of two sealants, the authors measured bisphenol A (BPA) in saliva and urine samples collected at prescribed intervals after the sealants were placed. Helioseal F (Ivoclar Vivadent, Amherst, N.Y.) leached negligible amounts of BPA. Urinary and salivary BPA levels in subjects who received these sealants were similar to baseline levels. Delton Light Cure (LC) Opaque pit-and-fissure sealant (Dentsply/Ash, York, Pa.) leached more BPA, resulting in low-level BPA exposures similar to those used in laboratory animal testing. BPA exposure after Delton LC sealant placement was significantly higher than exposure after placement of Helioseal F. Patients treated with Delton LC had significantly higher doses of BPA (110 ug) than did those treated with Helioseal F (5.5 ug) (P < .0001). Placement of clinically relevant amounts of Delton LC sealant resulted in low-level BPA exposure; however, exposure was negligible after placement of Helioseal F. Saliva collection after sealant placement likely reduced systemic absorption of BPA from dental sealants.[Joskow R et al; J Am Dent Assoc 137 (3): 353-62 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	... Blood samples were obtained from healthy premenopausal women, women with early and full-term pregnancy, and umbilical cord at full-term delivery. Ovarian follicular fluids obtained during IVF procedures and amniotic fluids obtained at mid-term and full-term pregnancy were also subject to bisphenol A (BPA) measurements. BPA was present in serum and follicular fluid at approximately 1-2 ng/mL, as well as in fetal serum and full-term amniotic fluid, confirming passage through the placenta. Surprisingly, an approximately 5-fold higher concentration, 8.3 +/- 8.7 ng/mL, was revealed in amniotic fluid at 15-18 weeks gestation, compared with other fluids.[Ikezuki Y et al; Hum Reprod 17 (11): 2839-41 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ADE - ABSORPTION, DISTRIBUTION AND EXCRETION	The effects of genetic polymorphism in sulfotransferase (SULT) 1A1 on urinary bisphenol A (BPA), a biomarker for BPA exposure, /was studied/ in 73 Koreans (male, 34; female, 39; age, 48.9 +/- 11.9 yrs). Reverse phase-HPLC/FD /was used/ for analysis of urinary BPA and information /was obtained/ from each subject on lifestyle, environment, and potential exposure to BPA via food. The HPLC/FD method showed good reproducibility (CVs < 0.1) and a relatively sensitive detection limit of 0.012 ug/L. These methods yielded a geometric mean of urinary BPA as 9.54 ug/L (8.91 ug/g creatinine), with a geometric standard deviation of 8.32 ug/L. Among potential routes for BPA exposure, only "vinyl wrapping of microwave heating" indicated a borderline positive association with urinary BPA level (p = 0.1). After PCR-RFLP, ... the allele frequencies of SULT1A1*1 and SULT1A1*2 were 0.89 and 0.11, respectively within the subjects. As the SULT1A1*1 allele of SULT1A1 is known to be a rapid sulfonylation-allele, the presence of SULT1A1*1 is suspected to rapidly dispose of environmental BPA. However resultant, urinary BPA levels were not significantly different between the SULT1A1*1/*1 identified subjects and the SULT1A1*1/*2 subjects.[Yang M et al; Arch Environ Contam Toxicol 44 (4): 546-51 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
METB - METABOLISM/METABOLITES	... The metabolism of bisphenol A [2,2-bis(4-hydroxyphenyl)propane] (BPA) by CD1 mice liver microsomal and S9 fractions was investigated. Nine metabolites were isolated and characterized using HPLC and mass spectrometry. Many of these metabolites were characterized for the first time in mammals, namely isopropyl-hydroxyphenol (produced by the cleavage of BPA), a bisphenol A glutathione conjugate, glutathionyl-phenol, glutathionyl 4-isopropylphenol, and BPA dimers.[Jaeg JP et al; J Agric Food Chem 52 (15): 4935-42 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
METB - METABOLISM/METABOLITES	... In this study, bisphenol A (BPA) levels in 30 healthy Koreans (men, N=15, 42.6 +/- 2.4 years; women, N=15, 43.0 +/- 2.7 years) were analyzed from urine treated with/without beta-glucuronidase and/or sulfatase by an RP-HPLC with fluorescence detection. The total BPA concentrations including free BPA and the urinary conjugates were similar in men and women (2.82 +/- 0.73 and 2.76 +/- 0.54 ng/mL, respectively), but gender differences were found in the levels of urinary BPA conjugates. Men had significantly higher levels of BPA-glucuronide (2.34 +/- 0.85 ng/mL) than women (1.00 +/- 0.34 ng/mL), whereas women had higher levels of BPA-sulfate (1.20 +/- 0.32 ng/mL) than men (0.49 +/- 0.27 ng/mL).[Kim YH et al; Biochem Biophys Res Commun 312 (2): 441-8 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
METB - METABOLISM/METABOLITES	... The objective of this study was to determine if a route dependency exists in the pharmacokinetics and metabolism of 14C-labeled bisphenol A (BPA) following single oral (po), intraperitoneal (ip), or subcutaneous (sc) doses of either 10 or 100 mg/kg to Fischer 344 rats. Results indicated a marked route dependency in the pharmacokinetics of BPA. The relative bioavailability of BPA and plasma radioactivity was markedly lower following oral administration as compared to sc or ip administration. The major fraction of plasma radioactivity following oral dosing was the monoglucuronide conjugate of BPA (68-100% of plasma radioactivity). BPA was the major component in plasma at Cmax following sc or ip administration exceeded only by BPA-monoglucuronide in females dosed ip. Up to four additional unidentified metabolites were present only in the plasma of animals dosed ip or sc. One of these, found only following ip administration, was tentatively identified as the monosulfate conjugate of BPA. The monoglucuronide conjugate was the major urinary metabolite; unchanged BPA was the principal component excreted in feces. ...[Pottenger LH et al; Toxicol Sci 54 (1): 3-18 (2000)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

METB - METABOLISM/METABOLITES	Previous studies demonstrated the rapid clearance of bisphenol A (BPA) from blood following oral administration to adult rats with the principal metabolite being BPA-monoglucuronide (BPA-glucuronide). Since the ontogeny of glucuronyl transferases (GT) differs with age, the pharmacokinetics of BPA were studied in neonatal animals. (14)C-BPA was administered via gavage at 1 or 10 mg/kg body weight to rats at postnatal day (pnd) 4, pnd 7, pnd 21, or to 11 week old adult rats (10 mg/kg dose only). Blood (neonates and adults) and selected tissues (neonates) were collected at 0.25, 0.75, 1.5, 3, 6, 12, 18, and 24 h postdosing. BPA and BPA-glucuronide in the plasma were quantified by high-performance liquid chromatography; radioactivity in the plasma and tissues was quantified by liquid scintillation spectrometry. The data indicate that neonatal rats at all three ages metabolized BPA to BPA-glucuronide, although an age dependency in the number and concentration of plasma metabolites was observed, consistent with the ontogeny of GT. BPA-glucuronide and BPA concentrations in the plasma were greater in neonates than in adults, except at 24 hr postdosing, suggesting an immaturity in the development of hepatic excretory function in neonatal rats. ... A dose dependency in the metabolism and pharmacokinetics of BPA administered to neonates was also observed with nearly complete metabolism of BPA to BPA-glucuronide (94-100% of the plasma radioactivity) at a dose of 1 mg/kg. This was in contrast to finding up to 13 different plasma metabolites observed at the 10 mg/kg dose. ...[Domoradzki JY et al; Toxicol Sci 77 (2): 230-42 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
METB - METABOLISM/METABOLITES	Bisphenol A, an environmental estrogenic chemical, was found to conjugate highly with glucuronic acid in male rat liver microsomes studied in vitro. In the various isoforms tested (1A1, 1A3, 1A5, 1A6, 1A7 and 2B1), glucuronidation of bisphenol A and of diethylstilbestrol, a synthetic crystalline compound possessing estrogenic activity and known to be glucuronidated by liver microsomes, was catalyzed by an isoform of UDP-glucuronosyltransferase (UGT), namely UGT2B1, which glucuronidates some endogenous androgens. UGT activity towards bisphenol A in liver microsomes and in UGT2B1 expressed in yeast AH22 cells (22.9 and 0.58 nmol/min per mg of microsomal proteins respectively) was higher than that towards diethylstilbestrol (75.0 and 4.66 pmol/min per mg of microsomal proteins respectively). UGT activities towards both bisphenol A and diethylstilbestrol were distributed mainly in the liver but were also observed at substantial levels in the kidney and testis. ...[Yokota H et al; Biochem J 340 (Pt 2): 405-9 (1999)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
METB - METABOLISM/METABOLITES	... In rats, bisphenol A (BPA) is metabolized to glucuronide by UDP-glucuronosyltransferase UGT2B1 in the liver and excreted into the bile. In this study, ... most of the bisphenol A-glucuronide (BPA-GA) excreted into the small intestine was deconjugated in the contents of the cecum. After BPA administration, BPA-GA was (immediately should be 15 min) found in the contents of the upper part of the small intestine, and then it moved to the lower part of the small intestine. However, only free BPA was found in the content of the cecum, and there was smaller amount of free BPA in the colon contents, indicating that BPA had been reabsorbed in the colon. BPA-GA was deconjugated by extract prepared from the cecum content which included highest beta-glucuronidase (beta-Gase) observed in Western blot analysis using antibodies against bacterial beta-Gase.These results indicate enterohepatic circulation of BPA and suggest that the adverse effects of BPA are enhanced by repeated exposure.[Sakamoto H et al; Biochim Biophys Acta 1573 (2): 171-6 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
BHL - BIOLOGICAL HALF-LIFE	... Following a single oral or intravenous (iv) dose of 100 ug/kg (ring-(14)C(U)) radiolabeled bisphenol A ((14)C-BPA) to male and female cynomolgus monkeys ... the terminal elimination half-life was larger post-iv dose (t(1/2iv) = 13.5 to 14.7 hr) than post-oral dose (t(1/2oral) = 9.63 to 9.80 hr). After iv dose, the fast-phase half-life (t(1/2f)) of total radioactivity was 0.61 to 0.67 hr. The t(1/2f) of unchanged (14)C-BPA for females (0.39 hr) was smaller than that for males (0.57 hr).[Kurebayashi H et al; Toxicol Sci 68 (1): 32-42 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
BHL - BIOLOGICAL HALF-LIFE	...The oral bioavailability was determined after administration of relatively low iv (0.1 mg/kg) and oral (10 mg/kg) doses of bisphenol A to rats. ... The apparent terminal elimination half-life of bisphenol A (21.3 +/- 7.4 hr) after oral administration was significantly longer than that after iv injection[Yoo SD et al; J Toxicol Environ Health A 64 (5): 417-26 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
BHL - BIOLOGICAL HALF-LIFE	...Bisphenol A was injected intravenously to mouse, rat, rabbit and dog (1-2 mg/kg doses). The obtained serum concentration-time profiles were best described by bi-exponential equations in all these animal species, with the mean ... t(1/2) of 39.9 min in mouse, 37.6 min in rat, and 40.8 min in rabbit, and 43.7 min in dog, respectively. ... The simple allometric scaling and different time transformation methods predicted the human t(1/2) ranging from 43.6 to 196.2 min. ...[Cho CY et al; Xenobiotica 32 (10): 925-34 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
BHL - BIOLOGICAL HALF-LIFE	The toxicokinetics of bisphenol A (BPA) in F344 rats, cynomolgus monkeys and chimpanzees /were examined/. ...After the oral administration of 10 mg/kg BPA, both C(max) and AUCs of BPA metabolites were ranked in the following order: cynomolgus monkeys>chimpanzees>rats, and the terminal elimination half-life (T(1/2)) in rats was greater than that in cynomolgus monkeys and chimpanzees, suggesting the enterohepatic circulation of BPA in rats. ...[Tominaga T et al; Toxicology 226 (2-3): 208-17 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ACTN - MECHANISM OF ACTION	...The toxicity of bisphenol A was definitively characterized in the water flea (Daphnia magna) in an effort to discern whether this compound may elicit endocrine toxicity in an invertebrate species and to establish the mechanism by which this toxicity is elicited. The ability of bisphenol A to interfere with two ecdysteroid-dependent physiological processes- molting and embryonic development- was evaluated. Bisphenol A elicited antiecdysteroidal activity as indicated by its prolongation of the intermolt period and interference with embryonic development. This apparent antiecdysteroidal activity was not due to reduced availability of endogenous ecdysteroid nor due to ecdysteroid-receptor antagonism. The ability of bisphenol A to elicit antiecdysteroidal activity by functioning as a juvenoid hormone was next evaluated. Bisphenol A, alone, did not elicit juvenoid activity. However, bisphenol A did enhance the activity of the crustacean juvenoid hormone methyl farnesoate. A definitive assessment of the effects of bisphenol A on the reproductive capacity of daphnids revealed a concentration- response relationship that extended at least one order of magnitude below exposure levels that were overtly toxic to the maternal organisms. These results demonstrate that bisphenol A is chronically toxic to daphnids, probably through its ability to interfere with ecdysteroid/juvenoid regulated processes. However, effects are elicited at levels that are not likely to pose environmental concern.[Mu X et al; Environ Toxicol Chem 24 (1): 146-52 (2005)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ACTN - MECHANISM OF ACTION	By using a yeast detection system for androgenic and antiandrogenic effects of chemicals, ... bisphenol A (BPA) and nonylphenol (NP) /were identified/ as antiandrogens. In this study, molecular mechanisms for the antiandrogenic action of BPA and NP /are examined/. In the ARhLBD-activating signal cointegrator 1 (ASC1) yeast two-hybrid system, which reflects the androgen-dependent interaction between androgen receptor (AR) and its coactivator, ASC1, BPA and NP acted as potent AR antagonists comparable to a known strong antagonist, cyproterone acetate. Ligand competition assays revealed that [3H]5alpha-dihydroxytestosterone (DHT) binding to AR is inhibited a maximum of 30 and 40% at approximately 5 nM of NP and 50 nM of BPA, respectively. In addition, the nuclear translocation of green fluorescent protein (GFP)-AR fusion protein in the presence of testosterone was affected by the addition of BPA and NP, which cause rather dispersed distribution of GFP-AR between the nuclear and the cytoplasmic compartments. Furthermore, in transient transfection assays, BPA and NP inhibited androgen-induced AR transcriptional activity. Taken together, the results suggest that BPA and NP affect multiple steps of the activation and function of AR, thereby inhibiting the binding of native androgens to AR, AR nuclear localization, AR interaction with its coregulator, and its subsequent transactivation.[Lee HJ et al; Toxicol Sci 75 (1): 40-6 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ACTN - MECHANISM OF ACTION	The estrogenic activities of bisphenol A (BPA) and its major metabolite BPA glucuronide (BPA-G) were assessed in a number of in vitro and in vivo assays. BPA competed with [3H]-17beta-estradiol (E2) for binding to mouse uterine cytosol ER, a glutathione S-transferase (GST)-human ER D, E, and F domain fusion protein (GST-hERalphadef) and full-length recombinant hERbeta. The IC(50) values for E2 were similar for all three receptor preparations, whereas BPA competed more effectively for binding to hERbeta (0.96 microM) than to either mouse uterine cytosol ER (26 uM) or GST-hERalphadef (36 uM). In contrast, BPA-G did not competitively displace [3H]E2 from any of the ER preparations. In MCF-7 cells transiently transfected with Gal4-hERalphadef or Gal4-hERbetadef, BPA induced reporter gene activity with comparable EC(50) values (71 and 39 uM, respectively). No significant induction of reporter gene activity was seen for BPA-G. Cotreatment studies showed that concentrations of (10 uM) BPA and BPA-G did not antagonize E2-induced luciferase mediated through either Gal4-hERalphadef or Gal4-hERbetadef. ...[Matthews JB et al; Chem Res Toxicol 14 (2): 149-57 (2001)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ACTN - MECHANISM OF ACTION	The effect of BPA on nitric oxide (NO) synthesis in the murine endothelial cell line, MSS31 /was examined/. BPA (1-100 uM) increased nitrite/nitrate, a stable metabolites of NO, levels in culture medium of MSS31. However, Western blotting showed that the level of endothelial NO synthase protein was not increased by 16 h of treatment with BPA (10 uM). ICI 182,780 (10 uM), an estrogen receptor (ER) antagonist, suppressed BPA-induced NO synthesis while actinomycin D (1 ug/mL), a transcription inhibitor, or cycloheximide (40 uM), a protein synthesis inhibitor, exhibited no effect on BPA-induced NO synthesis. These results indicate that BPA stimulates NO synthesis through a non-genomic ER-mediated mechanism. Short-term effects of BPA on NO synthesis were weak but similar to 17beta-estradiol.[Noguchi S et al; Toxicol Lett 135 (1-2): 95-101 (2002)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
ACTN - MECHANISM OF ACTION	...To compare global gene expression in response to bisphenol A (BPA) and estradiol (E2), a variant of the MCF-7 breast cancer cell line stably expressing HA-tagged ERalpha /was used/. Cultures were treated for 3hr with an ethanol vehicle, E2 (1X10-8 M), or BPA (1X10-6 M), followed by isolation of RNA and microarray analysis with the human U95A probe array (Affymetrix, Santa Clara, CA, USA). More than 300 genes were changed 2-fold or more by either or both agents, with roughly half being up-regulated and half down-regulated. A number of growth- and development-related genes, such as HOXC1 and C6, Wnt5A, Frizzled, TGFbeta-2, and STAT inhibitor 2, were found to be affected exclusively by BPA. We used quantitative real-time PCR to verify regulation of the HOXC6 gene, which showed decreased expression of approximately 2.5-fold by BPA.[Singleton DW et al; Environ Res 100 (1): 86-92 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value

ACTN - MECHANISM OF ACTION	... To provide insight into the estrogen-like nature of bisphenol A (BPA) and 4-nonylphenol (NPH), their ability to activate a reporter gene construct via an estrogen response element in the hormone-dependent breast cancer cell lines MCF7 and T47D was ascertained. Both compounds transactivated the endogenous estrogen receptor (ER) alpha in a direct fashion since the anti-estrogen 4-hydroxytamoxifen abolished the response. In addition, using steroid-receptor-negative HeLa cells engineered to express ERalpha and ERbeta and the hormone-binding domains of both ERalpha and ERbeta, BPA and NPH confirmed the direct transcriptional activity. Interestingly these properties were supported in MCF7 cells by the ability to autoregulate ERalpha expression as well as to induce its nuclear compartmentalization. We therefore evaluated by reverse transcriptase polymerase chain reaction the expression of estrogen-controlled genes such as cathepsin D and TFF1 (formerly pS2), which were increased by both chemicals tested. The agonistic effects exhibited in all assays performed prompted the evaluation of a more complex biological response such as the proliferation of MCF7 and T47D cells. The same concentration of xenoestrogens eliciting substantial transcriptional activity significantly stimulated the proliferation of both breast cancer cell lines, although with a reduced effectiveness with respect to the natural hormone 17beta-estradiol.[Recchia AG et al; Food Addit Contam 21 (2): 134-44 (2004)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
INTC - INTERACTIONS	... The aim of the present study was to investigate if bisphenol A induces oxidative stress in the liver of rats and if co-administration of vitamin C, an antioxidant, can prevent oxidative stress. Bisphenol A (0.2, 2.0 and 20 ug/kg body weight per day) and bisphenol A + vitamin C (0.2, 2.0, 20 ug + 40 mg/kg body weight per day) was orally administered to rats for 30 days. After 24 hr of the last treatment, rats were killed using overdose of anesthetic ether. Body weights of the animals and the weights of liver showed no significant changes. The activities of antioxidant enzymes, superoxide dismutase, catalase, glutathione reductase and glutathione peroxidase were decreased in mitochondrial and microsome-rich fractions of liver. The levels of hydrogen peroxide and lipid peroxidation increased in the treated rats when compared with the corresponding group of control animals. Activity of alanine transaminase, a marker enzyme of hepatic injury remained unchanged in the treated rats as compared with the corresponding control rats. Co-administration of bisphenol A and vitamin C showed no changes in the activities of superoxide dismutase, catalase, glutathione reductase and glutathione peroxidase and in the levels of hydrogen peroxide and lipid peroxidation as compared with the corresponding control groups.[Bindhumol V et al; Toxicology 188 (2-3): 117-24 (2003)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

Result Group

Component Name	Value
INTC - INTERACTIONS	Phytoestrogens have been described as weak estrogens, selective estrogen receptor mediators (SERMs) or to exhibit antiestrogenic properties. However, information about their activity in combination with xenoestrogens and 17beta-estradiol in vivo, is limited. Therefore, the combinatory activity of the phytoestrogen genistein (Gen), the industrial chemical bisphenol A (BPA), and ethinylestradiol (EE) in ovariectomized Wistar rats was analyzed in this study. All compounds were administered orally on three consecutive days (EE at 30 ug, Gen at 100 mg and BPA at 200 mg/kg body weight/day). The pure antiestrogen fulvestrant (3 mg/kg) served as estrogen receptor (ER) antagonist control. Effects on uterine wet weight, height of the uterine epithelium, uterine clusterin (Clu) and complement C3 expression, and the height of the vaginal epithelium were examined. Treatment with Gen alone resulted in a moderate stimulation of uterine weight; in the vagina the height of the epithelium was strongly stimulated. BPA did not stimulate any of the above-mentioned parameters significantly. In combination with EE, Gen acted on most of the analyzed parameters in an additive manner, whereas BPA significantly antagonized the effects of EE on the uterine epithelium and uterine Clu expression. Given in combination with Gen, BPA was also able to antagonize the stimulatory effect of Gen on the uterine epithelium. ... The results of this study characterize BPA as a functional antiestrogen, very likely the result of a lack of ability to activate ER-mediated transactivation after binding to the receptor. ...[Schmidt S et al; Arch Toxicol 80 (12): 839-45 (2006)] **PEER REVIEWED** <![CDATA[PubMed Abstract]]>

NLM TOXNET CCRIS URL

Result Group

Component Name	Value
URL	*External Link*

NLM TOXNET CCRIS Data CSTU - CARCINOGENICITY STUDIES

Result Group

Component Name	Value
Dose	0; 10; 100; 1000 ug/kg in corn oil, once a day from days 1-5 of life; study duration 18 mo)
Reference	[NEWBOLD,RR JEFFERSON,WN AND PADILLA-BANKS,E; LONG-TERM ADVERSE EFFECTS OF NEONATAL EXPOSURE TO BISPHENOL A ON THE MURINE FEMALE REPRODUCTIVE TRACT; REPRODUCTIVE TECHNOLOGY 24(2):253-258, 2007]
Results	Negative (Nonneoplastic and preneoplastic lesions observed in ovary/oviduct and uterus)
Route	Subcutaneous
Species	Mouse
Strain/Sex	CD-1/Female (24/group)
Tumor Site: Type of Lesion	Uterus; leiomyoma (0/18; 1/23; 2/20; 1/16 [multiple lesions])

Result Group

Component Name	Value
Dose	0; 5000; 10000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	NEGATIVE
Route	ORAL
Species	MOUSE
Strain/Sex	B6C3F1/FEMALE

Result Group

Component Name	Value
Dose	0; 1000; 5000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	EQUIVOCAL
Route	ORAL
Species	MOUSE
Strain/Sex	B6C3F1/MALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LYMPHOMA OR LEUKEMIA

Result Group

Component Name	Value
Dose	0; 1000; 2000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	EQUIVOCAL
Route	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LEUKEMIA

Result Group

Component Name	Value
Dose	0; 1000; 2000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	EQUIVOCAL
Route	ORAL
Species	RAT
Strain/Sex	F344/MALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LEUKEMIA

Result Group

Component Name	Value
Dose	0; 2.5; 25; 250; 1000 ug/kg bw/day from embryonic day 9 to postnatal day 1; study duration 50 or 95 postnatal days
Reference	[MURRAY,T MAFFINI,M UCCI,A SONNENSCHEIN,C AND SOTO,A; INDUCTION OF MAMMARY GLAND DUCTAL HYPERPLASIAS AND CARCINOMA IN SITU FOLLOWING FETAL BISPHENOL A EXPOSURE; REPRODUCTIVE TOXICOLOGY 23(3):383-390, 2007]
Results	Positive (Significant increase at all dose levels at PND 50; significant at 2.5 ug at PND 95
Route	Osmotic pump to dams
Species	Rat
Strain/Sex	Wistar-Furth/Female (?/group with maximum of 8 pups per dam)
Tumor Site: Type of Lesion	Mammary gland; ductal hyperplasia

NLM TOXNET CCRIS Data ISTU - TUMOR INHIBITION STUDIES

Result Group

Component Name	Value
Carcinogen	N-NITROSOBIS(2-HYDROXYPROPYL)AMINE; 53609-64-6
Comments	ANIMALS WERE CASTRATED AT 5 WK OF AGE
Dose [Carcinogen]	2000 MG/KG BW 1 WK POST BILATERAL OVARIECTOMY
Dose [Inhibitor]	0; 10000 PPM IN DIET FOR 27 WK BEGINNING 9 WK POST CARCINOGEN TREATMENT (STUDY DURATION: 37 WK)
Dose [Promoter]	1000 PPM IN DRINKING WATER WATER FOR 8 WK BEGINNING 1 WK POST CARCINOGEN TREATMENT
Endpoint [Incidence]	10/12 (83%), 4/15 (27%), 67%, P<0.01
Endpoint [Multiplicity]	1.18, 1.00, 15%, NOT SIGNIFICANT
Number of Animals Tested	(12,15)/(12,15)
Promoter	SULFADIMETHOXINE; 122-11-2
Reference	[TAKAGI,H MITSUMORI,K ONODERA,H NASU,M TAMURA,T YASHUHARA,K TAKEGAWA,K AND HIROSE,M; MODIFYING EFFECTS OF ENDOCRINE DISRUPTING CHEMICALS ON N-BIS (2-HYDROXYPROPYL) NITROSAMINE AND SULFADIMETHOXINE-INDUCED THYROID CARCINOGENESIS IN RATS; J. TOXICOL. PATHOL. 14(2):121-128, 2001]
Route [Carcinogen]	SUBCUTANEOUS
Route [Inhibitor]	ORAL
Route [Promoter]	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Target Tissue: Type of Lesion	THYROID GLAND: CARCINOMA

Result Group

Component Name	Value
Carcinogen	N-NITROSOBIS(2-HYDROXYPROPYL)AMINE; 53609-64-6
Comments	ANIMALS WERE CASTRATED AT 5 WK OF AGE
Dose [Carcinogen]	2000 MG/KG BW 1 WK POST BILATERAL OVARIECTOMY
Dose [Inhibitor]	0; 10000 PPM IN DIET FOR 27 WK BEGINNING 9 WK POST CARCINOGEN TREATMENT (STUDY DURATION: 37 WK)
Dose [Promoter]	1000 PPM IN DRINKING WATER WATER FOR 8 WK BEGINNING 1 WK POST CARCINOGEN TREATMENT
Endpoint [Incidence]	0/12 (0%), 0/15 (0%), 0%, NOT SIGNIFICANT
Endpoint [Multiplicity]	0, 0, 0%, NOT SIGNIFICANT
Number of Animals Tested	(12,15)/(12,15)

Promoter	SULFADIMETHOXINE; 122-11-2
Reference	[TAKAGI,H MITSUMORI,K ONODERA,H NASU,M TAMURA,T YASHUHARA,K TAKEGAWA,K AND HIROSE,M; MODIFYING EFFECTS OF ENDOCRINE DISRUPTING CHEMICALS ON N-BIS (2-HYDROXYPROPYL) NITROSAMINE AND SULFADIMETHOXINE-INDUCED THYROID CARCINOGENESIS IN RATS; J. TOXICOL. PATHOL. 14(2):121-128, 2001]
Route [Carcinogen]	SUBCUTANEOUS
Route [Inhibitor]	ORAL
Route [Promoter]	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Target Tissue: Type of Lesion	THYROID GLAND: ADENOMA

NLM TOXNET CCRIS Data MSTU - MUTAGENICITY STUDIES

Result Group

Component Name	Value
Dose Range	0; 10 mg/kg bw
Dose Range	Dosed by gavage 5 consecutive days, harvest 24 hr after last dose, colchicine added 75 min before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Positive (Structural changes (gaps))
Test System	Bone marrow cells

Result Group

Component Name	Value
Dose Range	0; 10; 50; 100 mg/kg bw
Dose Range	Single gavage dose, harvest 6, 24, 48, and 72 hr after last dose, colchicine added 75 min before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Positive (Structural changes)
Test System	Bone marrow cells

Result Group

Component Name	Value
Dose Range	0; 10; 50; 100 mg/kg bw
Dose Range	Single gavage dose 6, 24, 48, and 72 hr before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Negative
Test System	Bone marrow polychromatic erythrocytes

Result Group

Component Name	Value
Dose Range	0; 10 mg/kg bw
Dose Range	Dosed by gavage 5 consecutive days, harvest 24 hr after last dose
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Negative
Test System	Bone marrow polychromatic erythrocytes

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA97A
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA97A
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]

Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA102
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA102
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-0.2 MILLIMOLAR (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	V-79 (HPRT)/6-THIOGUANINE
Test System	CHINESE HAMSTER V-79

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)

Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	**Value**
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1535
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1535
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE

Strain/Indicator	TA1537
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1537
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	WP2UVRA
Test System	E.COLI

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	WP2UVRA
Test System	E.COLI

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	S-9
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	S-9
Method	PREINCUBATION

Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.35; 0.40; 0.45 MM (TEST MATERIAL SOLVENT: DMSO)
Dose Range	3 HR TREATMENT, 17 HR RECOVERY; COLCEMID ADDED 2-3 HR BEFORE HARVEST
Metabolic Activation	NONE
Reference	[HILLIARD,CA ARMSTRONG,MJ BRADT,CI HILL,RB GREENWOOD,SK AND GALLOWAY,SM; CHROMOSOME ABERRATIONS IN VITRO RELATED TO CYTOTOXICITY OF NONMUTAGENIC CHEMICALS AND METABOLIC POISONS; ENVIRON. MOL. MUTAGEN. 31(4):316-326, 1998]
Results	POSITIVE
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	20; 30; 40 UG/ML (TEST MATERIAL SOLVENT: DMSO)
Dose Range	8 HR TREATMENT; 13 HR RECOVERY; COLCEMID ADDED 2-2.5 HR BEFORE HARVEST
Metabolic Activation	NONE
Reference	[IVETT,JL, BROWN,BM, RODGERS,C, ANDERSON,BE, RESNICK,MA AND ZEIGER,E;CHROMOSOMAL ABERRATIONS AND SISTER CHROMATID EXCHANGE TESTS IN CHINESE HAMSTER OVARY CELLS IN VITRO. IV. RESULTS WITH 15 CHEMICALS; ENVIRON. MOL. MUTAGEN. 14(3): 165-187, 1989]
Results	NEGATIVE
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	30; 40; 50 UG/ML (TEST MATERIAL SOLVENT: DMSO)
Dose Range	2 HR TREATMENT; 8-9 HR RECOVERY; COLCEMID ADDED 2-2.5 HR BEFORE HARVEST
Metabolic Activation	RAT, LIVER, S-9, AROCLOR 1254
Reference	[IVETT,JL, BROWN,BM, RODGERS,C, ANDERSON,BE, RESNICK,MA AND ZEIGER,E;CHROMOSOMAL ABERRATIONS AND SISTER CHROMATID EXCHANGE TESTS IN CHINESE HAMSTER OVARY CELLS IN VITRO. IV. RESULTS WITH 15 CHEMICALS; ENVIRON. MOL. MUTAGEN. 14(3): 165-187, 1989]
Results	NEGATIVE; PREVIOUS TRIAL YIELDED POSITIVE RESULT AT 50 UG/ML BUT NO DOSE-RESPONSE WAS OBSERVED
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	1.5-37 ug/ml (Test material solvent: DMSO)
Dose Range	22-26 hr continuous treatment (One cell cycle)
Metabolic Activation	None
Reference	[JOHNSON,GE AND PARRY,EM; MECHANISTIC INVESTIGATIONS OF LOW DOSE EXPOSURES TO THE GENOTOXIC COMPOUNDS BISPHENOL-A AND ROTENONE; MUTATION RESEARCH/GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 651(1-2):56-63, 2008]
Results	Positive (all doses >10.8 ug/ml)
Test System	Human lymphoblastoid AHH-1 cells

NLM TOXNET CCRIS Data TSTU - TUMOR PROMOTION STUDIES

Result Group

Component Name	Value
Carcinogen	7,120Dimethylbenzanthracene (57-97-6)
Dose [Promoter]	0; 25; 250 ug/kg daily for 18 d from d 2 to d 20 postpartum to dams
Reference	[JENKINS,S, RAGHURAMAN,N, ELTOUM,I, CARPENTER,M, RUSSO,J, LAMARTINIERE,CA; ORAL EXPOSURE TO BISPHENOL A INCREASES DIMETHYLBENZANTHRACENE-INDUCED MAMMARY CANCER IN RATS. ENVIRON. HEALTH PERSP. 117(6): 910-915, 2009]
Route [Carcinogen]	Intragastric gavage
Route [Carcinogen]	30 mg/kg bw once to female offspring at 50 days of age
Route [Promoter]	Intragastric gavage
Species	Rat
Strain/Sex	Sprague Dawley CD/Female
Target Tissue: Type of Lesion	Breast tumors: Incidence increased in offspring of 250 ug/kg dams; latent period decreased

NLM TOXNET Toxicology

Result Group

Component Name	Value
Effect	AUTONOMIC NERVOUS SYSTEM: OTHER (DIRECT) PARASYMPATHOMIMETIC BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD BEHAVIORAL: ATAXIA
Organism	guinea pig
PubMed ID	0
Reference	Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 33(7), Pg. 25, 1968.
Reported Dose	4gm/kg (4000mg/kg)
Test type	LD50

Result Group

Component Name	Value
Organism	mammal (species unspecified)
PubMed ID	0
Reference	Toxicology of Drugs and Chemicals, Deichmann, W.B., New York, Academic Press, Inc., 1969Vol. -, Pg. 135, 1969.
Reported Dose	6500mg/kg (6500mg/kg)
Test type	LD50

Result Group

Component Name	Value
Effect	BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) BEHAVIORAL: ATAXIA LUNGS, THORAX, OR RESPIRATION: DYSPNEA
Organism	mouse
PubMed ID	0
Reference	Toksikologiya Novykh Promyshlennykh Khimicheskikh Veshchestv. Toxicology of New Industrial Chemical Substances. For English translation, see TNICS*. Vol. 2, Pg. 50, 1961.
Reported Dose	> 1700mg/m3/2H (1700mg/m3)
Test type	LC

Result Group

Component Name	Value
Organism	mouse
PubMed ID	0
Reference	National Technical Information Service. Vol. AD691-490
Reported Dose	150mg/kg (150mg/kg)
Test type	LD50

Result Group

Component Name	Value
Effect	AUTONOMIC NERVOUS SYSTEM: OTHER (DIRECT) PARASYMPATHOMIMETIC BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD BEHAVIORAL: ATAXIA
Organism	mouse
PubMed ID	0
Reference	Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 33(7), Pg. 25, 1968.
Reported Dose	2400mg/kg (2400mg/kg)
Test type	LD50

Result Group

Component Name	Value
Effect	BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) LIVER: FATTY LIVER DEGERATION
Organism	mouse
PubMed ID	0
Reference	Toksikologiya Novykh Promyshlennykh Khimicheskikh Veshchestv. Toxicology of New Industrial Chemical Substances. For English translation, see TNICS*. Vol. 2, Pg. 50, 1961.
Reported Dose	2500mg/kg (2500mg/kg)
Test type	LDLo

Result Group

Component Name	Value
Organism	rabbit
PubMed ID	6032412
Reference	American Industrial Hygiene Association Journal. Vol. 28, Pg. 301, 1967.
Reported Dose	2230mg/kg (2230mg/kg)
Test type	LD50

Result Group

Component Name	Value
Organism	rabbit
PubMed ID	0
Reference	AMA Archives of Industrial Hygiene and Occupational Medicine. Vol. 4, Pg. 119, 1951.
Reported Dose	3mL/kg (3mL/kg)
Test type	LD50

Result Group

Component Name	Value
Organism	rat
PubMed ID	6032412
Reference	American Industrial Hygiene Association Journal. Vol. 28, Pg. 301, 1967.
Reported Dose	3250mg/kg (3250mg/kg)
Test type	LD50

UMD list of Acute Toxins, Teratogens, Carcinogens, or Mutagens

Result Group

Component Name	Value
Carcinogen	-> meets the University of Maryland definition of a Teratogen for the purpose of the Chemical Hygiene Plan. It was listed as a teratogen in the "Dangerous Properties of Industrial Materials", 7th Ed., by N. Irving Sax and Richard J. Lewis.

USGS Study of WWCs in Milwaukee 2004-2005

Result Group

Component Name	Value
Detection Frequency	0
endocrine-disrupting chemicals (EDCs)	YES

Maximum	Not Detected
Median	Not Detected
Possible compound uses or sources	Manufacturing polycarbonate resins, antioxidant, flame retardant
Reporting level (g/L)	1
WWC Class	Antioxidants
WWC Group	Group 1

USGS Target National Reconnaissance of Emerging Contaminants (NREC) project in US Streams

Result Group

Component Name	Value
Analytical Method	Method 4 targets 46 OWCs - continuous liquid-liquid extraction (CLLE) with capillary gas chromatography/mass spectrometry (GC/MS) analysis
Chemical Class	OtherWastewater-RelatedCompounds
Comment	Pimephales promelas(fathead minnow) ' 96 h exposure LC50
Compounds suspected of being hormonally active	Compound suspected of being hormonally active
lowest LC50 for the most sensitive indicator species (g/L)/no. of aquatic studies identified	3600/26
max (g/L)	12
MCL or HAL	Not Available
median (g/L)	0.14000000000000001
Use	plasticizer

Acute Toxicity

CheLIST combination of files from EU Reseearch lists

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	DGENV EAS
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	FP6 ReProTect
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Acute Toxicity Data from EPA HPVIS

Result Group

Component Name	Value
Concentration Result Type	LD
Concentration Units	mg/kg-bw
Concentration Value Description	=
Dose Remarks	2150 3160 4640 6810
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	LD50 (males) = 4100 mg/kgLD50 (females) = 3300 mg/kg The calculated LD50 values were 4 100 mg/kg in males and 3 300 mg/kg in females. No other aspects of the study were reported.
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	NTP. 1982. Carcinogenesis Bioassay of Bisphenol A (CAS No. 80-05-7) in F344 Rats B6C3F1 Mice (Feed Study). National Toxicology Program. Technical Report No. 215 Order No. PB82-184060 (NTIS) 1-116. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	# Animals: 5/sex Rats (5 per sex per group) were given 2 150 3 160 4 640 or 6 810 mg/kgof bisphenol A.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	Value
Concentration Result Type	LD

Concentration Units	mg/kg-bw
Concentration Value Description	=
Dose Remarks	2150 3160 4640 6810
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	LD50 (males) = 4100 mg/kgLD50 (females) = 3300 mg/kg The calculated LD50 values were 4 100 mg/kg in males and 3 300 mg/kg in females. No other aspects of the study were reported.
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	NTP. 1982. Carcinogenesis Bioassay of Bisphenol A (CAS No. 80-05-7) in F344 Rats B6C3F1 Mice (Feed Study). National Toxicology Program. Technical Report No. 215 Order No. PB82-184060 (NTIS) 1-116. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	# Animals: 5/sex Rats (5 per sex per group) were given 2 150 3 160 4 640 or 6 810 mg/kgof bisphenol A.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	**Value**
Concentration Result Type	LD
Concentration Units	mg/kg-bw
Concentration Value Description	=
Gender	No Data
GLP	No
Mammalian Strain	No Data
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Route of Administration	Oral
Species or in Vitro System	Rabbit
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Mellon Institute of Industrial Research. 1948. The Acute and Subacute Toxicity of Diphenylol Propane. Study No. 11-13. Union Carbide Corporation Unpublished Report. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	A rabbit LD50 value was obtained. No other details are reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	No Data

Result Group

Component Name	**Value**
Concentration Result Type	LC
Concentration Units	mg/L
Concentration Value Description	>
Dose Remarks	0 170 mg/L
Gender	Both M/F
GLP	No Data
Mammalian Strain	Fischer 344
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	The mass median aerodynamic diameter (MMAD) of the test substance was 3.9 micrometers (m) and the exposure concentration used was the highest attainable by the investigators with the test system used. Half the animals were necropsied on the day following exposure and the rest on day 14. Microscopic examination was limited to the respiratory tract (nasal turbinates larynx trachea and lungs) and associated tissues. No deaths occurred and therefore the LD50 value for rats is >170 mg/m3 for 6 hours. No gross signs of toxicity were observed. At necropsy "slight" inflammation of the epithelium lining of the anterior portion of the nose and "slight ulceration" of the oronasal duct were reported in 5/5 males and 4/5 females exposed to 170 mg/m3 and sacrificed on day 2. No exposure-related effects were observed in animals necropsied on day 14.
Route of Administration	Inhalation
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Nitschke K.D. Quast J.F. and Wolfe E.L. 1985. Bisphenol A: Acute Aerosol Toxicity Study with Fischer 344 Rats. Dow Chemical Company Unpublished Report. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.

Test Conditions Remarks	Groups of 10 male and female Fischer F344 rats were exposed wholebody to Bisphenol A dust at concentrations of 0 or 170 mg/m3.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Exposure	Particulate

EPA IRIS (Integrated Risk Information System)

Result Group

Component Name	Value
Date of Last Significant Revision	32412
IRIS Summary	*External Link*
Literature Screening Review	Yes
Quick View Report	*External Link*

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

Toxipedia Chemicals List and Factsheets. Toxipedia is a project of the Institute of Neurotoxicology and Neurological Disorders.

Result Group

Component Name	Value
Toxipedia Chemicals URL	*External Link*

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

UMD list of Acute Toxins, Teratogens, Carcinogens, or Mutagens

Result Group

Component Name	Value
Carcinogen	-> meets the University of Maryland definition of a Teratogen for the purpose of the Chemical Hygiene Plan. It was listed as a teratogen in the "Dangerous Properties of Industrial Materials", 7th Ed., by N. Irving Sax and Richard J. Lewis.

Chronic Toxicity

CPDB Report on Carcinogenicity Potency URL (Univ. Cal., Berkeley)

Result Group

Component Name	Value
Report on Carcinogenicity (RoC) Potency URL	*External Link*

DSSTox NTP BSI Chronic / Cancer Study Index

Result Group

Component Name	Value
NTP_StudyArea_CancerChronicTox	Study Report Available

DSSTox NTP BSI URL

Result Group

Component Name	Value
NTP Bioassay URL	*External Link*

EPA IRIS (Integrated Risk Information System)

Result Group

Component Name	Value
Date of Last Significant Revision	32412
IRIS Summary	*External Link*
Literature Screening Review	Yes
Quick View Report	*External Link*

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

NTP Long Term Toxicology / Carcinogenicity Study Abstracts and Reports

Result Group

Component Name	Value
Abstract URL	*External Link*
Full Report URL	*External Link*

Toxipedia Chemicals List and Factsheets. Toxipedia is a project of the Institute of Neurotoxicology and Neurological Disorders.

Result Group

Component Name	Value
Toxipedia Chemicals URL	*External Link*

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

Carcinogenicity

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

CheLIST combination of files from EU Reseearch lists

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	DGENV EAS
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	FP6 ReProTect
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CPDB Report on Carcinogenicity Potency URL (Univ. Cal., Berkeley)

Result Group

Component Name	Value
Report on Carcinogenicity (RoC) Potency URL	*External Link*

DSSTox Cancer Potency Database Summary

Result Group

Component Name	Value
ActivityCategory_MultiCellCall	0.0
ActivityCategory_MultiCellCall_Details	multisex inactive; multispecies inactive
ActivityCategory_SingleCellCall	0.0
Endpoint	TD50; Tumor Target Sites
Mutagenicity_SAL_CPDB	negative
NTP Report Number	TR 215
Species	rat; mouse
StudyType	Carcinogenicity
TargetSites_Mouse_Female	no positive results
TargetSites_Mouse_Male	no positive results
TargetSites_Rat_Female	no positive results
TargetSites_Rat_Male	no positive results
TD50_Mouse_Note	no positive results
TD50_Rat_Note	no positive results

DSSTox Cancer Potency Database URL

Result Group

Component Name	Value
Cancer Potency Database URL	*External Link*

DSSTox NTP BSI Chronic / Cancer Study Index

Result Group

Component Name	Value
NTP_StudyArea_CancerChronicTox	Study Report Available

DSSTox NTP BSI URL

Result Group

Component Name	Value
NTP Bioassay URL	*External Link*

DSSTox IRIS Study Summaries

Result Group

Component Name	Value
DrinkingWater_OralSlope_Assessed	0.0
DrinkingWater_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Endpoint	cancer; acute; short-term; sub-chronic; chronic; developmental
Inhalation_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Inhalation_RfC_Assessed	0.0
Inhalation_RfC_CriticalEffects	Not assessed under the IRIS program.
Inhalation_UnitRisk_Assessed	0.0

Oral_RfD_Assessed	1.0
Oral_RfD_Confidence	High
Oral_RfD_CriticalEffects	decreased mean body weight
Oral_RfD_mg_per_kg_day	0.05 mg/kg-bw/day
Oral_RfD_mmol_per_kg_day	2.19E-4 mmol/kg-bw/day
Oral_RfD_Notes	LOAEL (Lowest observed adverse effect level): 50 mg/kg-day
Species	rodent; human; dog; rabbit
StudyType	Human Health Exposure Toxicity Review for Risk Assessment
TotalAssessments	1.0
WtOfEvidence_1986GuidelineCategories	Not assessed under the IRIS program.
WtOfEvidence_Cancer_Assessed	0.0

DSSTox IRIS URLs

Result Group

Component Name	Value
IRIS URL	*External Link*

EPA IRIS (Integrated Risk Information System)

Result Group

Component Name	Value
Date of Last Significant Revision	32412
IRIS Summary	*External Link*
Literature Screening Review	Yes
Quick View Report	*External Link*

EPA mid-Atlantic Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDo	0.05
RfDoNote	I = IRIS

EPA Mid-Atlantic Region Protection of Groundwater (screening levels)

Result Group

Component Name	Value
Risk Based soil-to-groundwater screening levels (SSL)	44

EPA Southwest region Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDoNote	I

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

NTP Long Term Toxicology / Carcinogenicity Study Abstracts and Reports

Result Group

Component Name	Value
Abstract URL	*External Link*
Full Report URL	*External Link*

OSHA Chemical Sampling Information

Result Group

Component Name	Value
Chemical URLs	*External Link*

Chemical and Physical properties from Risk Assessment Information System (RAIS)

Result Group

Component Name	Value
Absorption Factor, Dermal	1.00E-01
Beef Transfer Coeff.	5.22E-05
Density	-
Diffusivity in Air	5.09E-02
Diffusivity in Water	5.94E-06
Fish Bioacc. Factor	4.38E+01
GI Absorption Factor	1.00E+00
Log of Octanol-Water Partition Coef.	3.32E+00
Melting Point	1.53E+02
Milk Transfer Coeff.	1.65E-05
Molecular Weight	2.28E+02
Organic Carbon Partition Coef.	3.77E+04
Reference for Beef Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Boiling Point	LANGE
Reference for Diffusivity in Air	WATER9 (U.S. EPA, 2001)
Reference for Diffusivity in Water	WATER9 (U.S. EPA, 2001)
Reference for Fish Bioacc. Factor	EPI
Reference for Log of Octanol-Water Partition Coef.	EPI

Reference for Melting Point	EPI
Reference for Milk Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Molecular Weight	EPI
Reference for Organic Carbon Partition Coef.	EPI
Reference for Skin Permeability Constant	EPI
Reference for Soil-to-Dry Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Soil-to-Wet Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Unitless Henry's Law Constant	EPI
Reference for Vapor Pressure	EPI
Reference for Water Solubility	EPI
Skin Permeability Constant	1.32E-02
Soil-Water Partition Coef.	-
Unitless Henry's Law Constant	3.74E-10
Vapor Pressure	2.27E-07
Water Solubility	1.20E+02

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

NLM TOXNET CCRIS URL

Result Group

Component Name	Value
URL	*External Link*

NLM TOXNET CCRIS Data CSTU - CARCINOGENICITY STUDIES

Result Group

Component Name	Value
Dose	0; 10; 100; 1000 ug/kg in corn oil, once a day from days 1-5 of life; study duration 18 mo)
Reference	[NEWBOLD,RR JEFFERSON,WN AND PADILLA-BANKS,E; LONG-TERM ADVERSE EFFECTS OF NEONATAL EXPOSURE TO BISPHENOL A ON THE MURINE FEMALE REPRODUCTIVE TRACT; REPRODUCTIVE TECHNOLOGY 24(2):253-258, 2007]
Results	Negative (Nonneoplastic and preneoplastic lesions observed in ovary/oviduct and uterus)
Route	Subcutaneous
Species	Mouse
Strain/Sex	CD-1/Female (24/group)
Tumor Site: Type of Lesion	Uterus; leiomyoma (0/18; 1/23; 2/20; 1/16 [multiple lesions])

Result Group

Component Name	Value
Dose	0; 5000; 10000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	NEGATIVE
Route	ORAL
Species	MOUSE
Strain/Sex	B6C3F1/FEMALE

Result Group

Component Name	Value
Dose	0; 1000; 5000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	EQUIVOCAL
Route	ORAL
Species	MOUSE
Strain/Sex	B6C3F1/MALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LYMPHOMA OR LEUKEMIA

Result Group

Component Name	Value
Dose	0; 1000; 2000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]
Results	EQUIVOCAL
Route	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LEUKEMIA

Result Group

Component Name	Value
Dose	0; 1000; 2000 PPM IN DIET FOR 103 WK (STUDY DURATION: 103 WK)
Reference	[NCI/NTP CARCINOGENESIS TECHNICAL REPORT SERIES; NATIONAL CANCER INSTITUTE/NATIONAL TOXICOLOGY PROGRAM; U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, TR-215 Y82]

Results	EQUIVOCAL
Route	ORAL
Species	RAT
Strain/Sex	F344/MALE
Tumor Site: Type of Lesion	HEMATOPOIETIC SYSTEM: LEUKEMIA

Result Group

Component Name	Value
Dose	0; 2.5; 25; 250; 1000 ug/kg bw/day from embryonic day 9 to postnatal day 1; study duration 50 or 95 postnatal days
Reference	[MURRAY,T MAFFINI,M UCCI,A SONNENSCHEIN,C AND SOTO,A; INDUCTION OF MAMMARY GLAND DUCTAL HYPERPLASIAS AND CARCINOMA IN SITU FOLLOWING FETAL BISPHENOL A EXPOSURE; REPRODUCTIVE TOXICOLOGY 23(3):383-390, 2007]
Results	Positive (Significant increase at all dose levels at PND 50; significant at 2.5 ug at PND 95
Route	Osmotic pump to dams
Species	Rat
Strain/Sex	Wistar-Furth/Female (?/group with maximum of 8 pups per dam)
Tumor Site: Type of Lesion	Mammary gland; ductal hyperplasia

NLM TOXNET CCRIS Data ISTU - TUMOR INHIBITION STUDIES

Result Group

Component Name	Value
Carcinogen	N-NITROSOBIS(2-HYDROXYPROPYL)AMINE; 53609-64-6
Comments	ANIMALS WERE CASTRATED AT 5 WK OF AGE
Dose [Carcinogen]	2000 MG/KG BW 1 WK POST BILATERAL OVARIECTOMY
Dose [Inhibitor]	0; 10000 PPM IN DIET FOR 27 WK BEGINNING 9 WK POST CARCINOGEN TREATMENT (STUDY DURATION: 37 WK)
Dose [Promoter]	1000 PPM IN DRINKING WATER WATER FOR 8 WK BEGINNING 1 WK POST CARCINOGEN TREATMENT
Endpoint [Incidence]	10/12 (83%), 4/15 (27%), 67%, P<0.01
Endpoint [Multiplicity]	1.18, 1.00, 15%, NOT SIGNIFICANT
Number of Animals Tested	(12,15)/(12,15)
Promoter	SULFADIMETHOXINE; 122-11-2
Reference	[TAKAGI,H MITSUMORI,K ONODERA,H NASU,M TAMURA,T YASHUHARA,K TAKEGAWA,K AND HIROSE,M; MODIFYING EFFECTS OF ENDOCRINE DISRUPTING CHEMICALS ON N-BIS (2-HYDROXYPROPYL) NITROSAMINE AND SULFADIMETHOXINE-INDUCED THYROID CARCINOGENESIS IN RATS; J. TOXICOL. PATHOL. 14(2):121-128, 2001]
Route [Carcinogen]	SUBCUTANEOUS
Route [Inhibitor]	ORAL
Route [Promoter]	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Target Tissue: Type of Lesion	THYROID GLAND: CARCINOMA

Result Group

Component Name	Value
Carcinogen	N-NITROSOBIS(2-HYDROXYPROPYL)AMINE; 53609-64-6
Comments	ANIMALS WERE CASTRATED AT 5 WK OF AGE
Dose [Carcinogen]	2000 MG/KG BW 1 WK POST BILATERAL OVARIECTOMY
Dose [Inhibitor]	0; 10000 PPM IN DIET FOR 27 WK BEGINNING 9 WK POST CARCINOGEN TREATMENT (STUDY DURATION: 37 WK)
Dose [Promoter]	1000 PPM IN DRINKING WATER WATER FOR 8 WK BEGINNING 1 WK POST CARCINOGEN TREATMENT
Endpoint [Incidence]	0/12 (0%), 0/15 (0%), 0%, NOT SIGNIFICANT
Endpoint [Multiplicity]	0, 0, 0%, NOT SIGNIFICANT
Number of Animals Tested	(12,15)/(12,15)
Promoter	SULFADIMETHOXINE; 122-11-2
Reference	[TAKAGI,H MITSUMORI,K ONODERA,H NASU,M TAMURA,T YASHUHARA,K TAKEGAWA,K AND HIROSE,M; MODIFYING EFFECTS OF ENDOCRINE DISRUPTING CHEMICALS ON N-BIS (2-HYDROXYPROPYL) NITROSAMINE AND SULFADIMETHOXINE-INDUCED THYROID CARCINOGENESIS IN RATS; J. TOXICOL. PATHOL. 14(2):121-128, 2001]
Route [Carcinogen]	SUBCUTANEOUS
Route [Inhibitor]	ORAL
Route [Promoter]	ORAL
Species	RAT
Strain/Sex	F344/FEMALE
Target Tissue: Type of Lesion	THYROID GLAND: ADENOMA

NLM TOXNET CCRIS Data TSTU - TUMOR PROMOTION STUDIES

Result Group

Component Name	Value
Carcinogen	7,120Dimethylbenzanthracene (57-97-6)
Dose [Promoter]	0; 25; 250 ug/kg daily for 18 d from d 2 to d 20 postpartum to dams
Reference	[JENKINS,S, RAGHURAMAN,N, ELTOUM,I, CARPENTER,M, RUSSO,J, LAMARTINIERE,CA; ORAL EXPOSURE TO BISPHENOL A INCREASES DIMETHYLBENZANTHRACENE-INDUCED MAMMARY CANCER IN RATS. ENVIRON. HEALTH PERSP. 117(6): 910-915, 2009]
Route [Carcinogen]	Intragastric gavage
Route [Carcinogen]	30 mg/kg bw once to female offspring at 50 days of age
Route [Promoter]	Intragastric gavage
Species	Rat
Strain/Sex	Sprague Dawley CD/Female

Target Tissue: Type of Lesion	Breast tumors: Incidence increased in offspring of 250 ug/kg dams; latent period decreased

UMD list of Acute Toxins, Teratogens, Carcinogens, or Mutagens

Result Group

Component Name	Value
Carcinogen	-> meets the University of Maryland definition of a Teratogen for the purpose of the Chemical Hygiene Plan. It was listed as a teratogen in the "Dangerous Properties of Industrial Materials", 7th Ed., by N. Irving Sax and Richard J. Lewis.

Genotoxicity

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

DSSTox NTP BSI GeneTox Index

Result Group

Component Name	Value
NTP_StudyArea_GeneTox	Study Report Available

DSSTox NTP BSI URL

Result Group

Component Name	Value
NTP Bioassay URL	*External Link*

Genotoxicity Data In Vitro from EPA HPVIS

Result Group

Component Name	Value
Conclusion	Negative
Conclusion (GeneTox)	This study was judged to have given a negative result since the observed increase in the first experiment was not reproducible.
Dose Remarks	30 - 50 g/mL with activation20 - 40 g/mL without activation
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	With metabolic activation: 50 g/mLWithout metabolic activation: None reported In the first test with metabolic activation an increase in the percentage of metaphases with chromosome aberrations from bisphenol A treated cultures was observed only at the top dose in the presence of cytotoxicity; 14% at 50 g/mL compared to 3% in controls. In these high-dose cultures it was stated that cell confluence was reduced by approximately 70%. In the second test no significant increases were observed in with metabolic activation; only 3% of cells at the highest dose had aberrations. No significant increases in aberrations were observed without metabolic activation with bisphenol A evidently being tested up to "toxic levels." The positive controls produced clear increases in chromosome aberrations.
Species	Mammalian Cell Line
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	Chinese Hamster Ovary (CHO)
Study Reference	Ivett J.L. Brown B.M. Rodgers C. Anderson B.E. Ressnick M.A. and Zeiger E. 1989. Chromosomal aberrations and sister chromatid exchange tests in Chinese hamster ovary cells in vitro. IV. Results with 15 chemicals. Environ. Mol. Mutagen. 14:165-187. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	In a chromosome aberration study in Chinese hamster ovary (CHO) cells were exposed in two separate experiments to 30-50 g/mL bisphenol A for 2 hours with metabolic activation and 20-40 g/mL for 8 hours without metabolic activation. Cells were harvested at 11 hours with metabolic activation and 21 hours without metabolic activation.
Test Substance Purity	Bisphenol A
Type of Study	in vitro mammalian chromosome aberration test

Result Group

Component Name	Value
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 333 g/plate
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Positive, Negative and Solvent Control Substance(s)	Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Program Flag	HPVIS
Reliability	2

Results Remarks	Cytotoxicity conc.: With and without metabolic activation: 333 g/plate At 333 g/plate slight and complete clearance of the background lawn was observed in all strains with (rat and hamster liver S9) and without metabolic activation respectively. No increase in the number of revertants was seen in any of the tested cultures. Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 100
Study Reference	Haworth S. Lawlor T. Mortelmans K. Speck W. and Zeiger E. 1983. Salmonella mutagenicity test results for 250 chemicals. Environ. Mutagen. 1:3-142. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	The pre-incubation method with Salmonella typhimurium strains TA98 TA100 TA1535 and TA1537 was used at bisphenol A concentrations up to 333 ?g/plate in the presence and absence of metabolic activation (Aroclor induced rat and hamster liver S9).
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 1538
Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	e. coli WP2 uvr A
Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.

Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

NLM TOXNET CCRIS Data MSTU - MUTAGENICITY STUDIES

Result Group

Component Name	Value
Dose Range	0; 10 mg/kg bw
Dose Range	Dosed by gavage 5 consecutive days, harvest 24 hr after last dose, colchicine added 75 min before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Positive (Structural changes (gaps))
Test System	Bone marrow cells

Result Group

Component Name	Value
Dose Range	0; 10; 50; 100 mg/kg bw
Dose Range	Single gavage dose, harvest 6, 24, 48, and 72 hr after last dose, colchicine added 75 min before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Positive (Structural changes)
Test System	Bone marrow cells

Result Group

Component Name	Value
Dose Range	0; 10; 50; 100 mg/kg bw
Dose Range	Single gavage dose 6, 24, 48, and 72 hr before harvest
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Negative
Test System	Bone marrow polychromatic erythrocytes

Result Group

Component Name	Value
Dose Range	0; 10 mg/kg bw
Dose Range	Dosed by gavage 5 consecutive days, harvest 24 hr after last dose
Reference	[NAIK,P, VIJAYALAXMI,KK; CYTOGENETIC EVALUATION FOR GENOTOXICITY OF BISPHENOL A IN BONE MARROW CELLS OF SWISS ALBINO MICE. MUTAT. RES., GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 676(1-2): 106-112, 2009]
Results	Negative
Test System	Bone marrow polychromatic erythrocytes

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA97A
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA97A
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE

Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA102
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.05-0.5 MG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHAFLAVONE
Method	STANDARD PLATE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	TA102
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-0.2 MILLIMOLAR (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Reference	[SCHWEIKL,H, SCHMALZ,G AND RACKEBRANDT,K; THE MUTAGENIC ACTIVITY OF UNPOLYMERIZED RESIN MONOMERS IN SALMONELLA TYPHIMURIUM AND V79 CELLS; MUTAT. RES. 415(1-2):119-130, 1998]
Results	NEGATIVE
Strain/Indicator	V-79 (HPRT)/6-THIOGUANINE
Test System	CHINESE HAMSTER V-79

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	NONE
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	0.1-1000 UG/PLATE (TEST MATERIAL SOLVENT: ACETIC ACID BUFFER PH 4.0)
Metabolic Activation	RAT LIVER S-9, AROCLOR 1254
Method	STANDARD PLATE
Reference	[SCHRADER,TJ LANGLOIS,I SOPER,K AND CHERRY,W; MUTAGENICITY OF BISPHENOL A (4,4'-ISOPROPYLIDENEDIPHENOL) IN VITRO: EFFECTS OF NITROSYLATION; TERATOG. CARCINOG. MUTAGEN. 22(6):425-441, 2002]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA98

Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1535
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1535
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1537
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION

Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	TA1537
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	WP2UVRA
Test System	E.COLI

Result Group

Component Name	Value
Dose Range	5-1250 UG/PLATE (TEST MATERIAL SOLVENT: DMSO)
Metabolic Activation	RAT LIVER S-9, PHENOBARBITAL AND BETA-NAPHTHOFLAVONE
Method	PREINCUBATION
Reference	[JAPAN CHEMICAL INDUSTRY ECOLOGY- TOXICOLOGY AND INFORMATION CENTER, JAPAN; MUTAGENICITY TEST DATA OF EXISTING CHEMICAL SUBSTANCES BASED ON THE TOXICITY INVESTIGATION OF THE INDUSTRIAL SAFETY AND HEALTH LAW; 1996]
Results	NEGATIVE
Strain/Indicator	WP2UVRA
Test System	E.COLI

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	S-9
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA100
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	NONE
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value
Dose Range	1 MM
Metabolic Activation	S-9
Method	PREINCUBATION
Reference	[MASUDA,S, TERASHIMA,Y, SANO,A, KURUTO,R, SUGIYAMA,Y, SHIMOI,K, TANJI,K, YOSHIOKA,H, TERAO,Y AND KINAE,N; CHANGES IN THE MUTAGENIC AND ESTROGENIC ACTIVITIES OF BISPHENOL A UPON TREATMENT WITH NITRITE; MUTAT. RES. 585(1-2):137-146, 2005]
Results	NEGATIVE
Strain/Indicator	TA98
Test System	AMES SALMONELLA TYPHIMURIUM

Result Group

Component Name	Value

Dose Range	0.35; 0.40; 0.45 MM (TEST MATERIAL SOLVENT: DMSO)
Dose Range	3 HR TREATMENT, 17 HR RECOVERY; COLCEMID ADDED 2-3 HR BEFORE HARVEST
Metabolic Activation	NONE
Reference	[HILLIARD,CA ARMSTRONG,MJ BRADT,CI HILL,RB GREENWOOD,SK AND GALLOWAY,SM; CHROMOSOME ABERRATIONS IN VITRO RELATED TO CYTOTOXICITY OF NONMUTAGENIC CHEMICALS AND METABOLIC POISONS; ENVIRON. MOL. MUTAGEN. 31(4):316-326, 1998]
Results	POSITIVE
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	20; 30; 40 UG/ML (TEST MATERIAL SOLVENT: DMSO)
Dose Range	8 HR TREATMENT; 13 HR RECOVERY; COLCEMID ADDED 2-2.5 HR BEFORE HARVEST
Metabolic Activation	NONE
Reference	[IVETT,JL, BROWN,BM, RODGERS,C, ANDERSON,BE, RESNICK,MA AND ZEIGER,E;CHROMOSOMAL ABERRATIONS AND SISTER CHROMATID EXCHANGE TESTS IN CHINESE HAMSTER OVARY CELLS IN VITRO. IV. RESULTS WITH 15 CHEMICALS; ENVIRON. MOL. MUTAGEN. 14(3): 165-187, 1989]
Results	NEGATIVE
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	30; 40; 50 UG/ML (TEST MATERIAL SOLVENT: DMSO)
Dose Range	2 HR TREATMENT; 8-9 HR RECOVERY; COLCEMID ADDED 2-2.5 HR BEFORE HARVEST
Metabolic Activation	RAT, LIVER, S-9, AROCLOR 1254
Reference	[IVETT,JL, BROWN,BM, RODGERS,C, ANDERSON,BE, RESNICK,MA AND ZEIGER,E;CHROMOSOMAL ABERRATIONS AND SISTER CHROMATID EXCHANGE TESTS IN CHINESE HAMSTER OVARY CELLS IN VITRO. IV. RESULTS WITH 15 CHEMICALS; ENVIRON. MOL. MUTAGEN. 14(3): 165-187, 1989]
Results	NEGATIVE; PREVIOUS TRIAL YIELDED POSITIVE RESULT AT 50 UG/ML BUT NO DOSE-RESPONSE WAS OBSERVED
Test System	CHO CELLS

Result Group

Component Name	Value
Dose Range	1.5-37 ug/ml (Test material solvent: DMSO)
Dose Range	22-26 hr continuous treatment (One cell cycle)
Metabolic Activation	None
Reference	[JOHNSON,GE AND PARRY,EM; MECHANISTIC INVESTIGATIONS OF LOW DOSE EXPOSURES TO THE GENOTOXIC COMPOUNDS BISPHENOL-A AND ROTENONE; MUTATION RESEARCH/GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 651(1-2):56-63, 2008]
Results	Positive (all doses >10.8 ug/ml)
Test System	Human lymphoblastoid AHH-1 cells

Developmental Toxicity

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

DSSTox NTP BSI DevTox Study Index

Result Group

Component Name	Value
NTP_StudyArea_DevelopTox	Study Report Available

DSSTox NTP BSI URL

Result Group

Component Name	Value
NTP Bioassay URL	*External Link*

Developmental Toxicity / Teratogenicity Data In Vitro from EPA HPVIS

Result Group

Component Name	Value
Concentration Result Type	LOAEL
Concentration Units	mg/kg bw/day
Concentration Value Description	=
Conclusion	No evidence of developmental toxicity in the rat was evident at exposure levels which are toxic to the mother. A maternal no effect level could not be identified; the LOAEL of 160 mg/kg based on clinical signs of toxicity and a statistically significant decrease (26%) in body weight gain was identified. No fetal effects were seen at the highest dose level evaluated 640 mg/kg.
Dose Remarks	0 160 320 640 or 1280 mg/kg/day
Exposure Period Units	Days
Frequency of Treatment	Daily
Gender	Female
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	No Data
Population	Female (Maternal)

Post-Exposure/Depuration Period Units	Days
Program Flag	HPVIS
Reliability	1
Results Remarks	Range-finding study: groups of 8 time-mated CD rats were gavaged with0 500 1000 1500 2000 2500 or 3000 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were examined for gross morphological abnormalities only. Deaths were observed in 1 5 3 and 5 rats at 1 500 2 000 2 500 and 3 000 mg/kg respectively. Clinical signs of toxicity were observed at all doses and included diarrhea lacrimation lethargy rough coat wheezing wet urogenital area arched back dyspnea bloody nose disorientation alopecia piloerection and vaginal bleeding. A statistically significant decrease in maternal body weight gain (24%) was observed at 1000 mg/kg and above during the gestation period and during the treatment period a decrease in maternal body weight was observed at 1500 mg/kg and above. No deaths were observed in the 0 160 320 and 640 mg/kg dose groups. At 1280 mg/kg deaths were observed in 7/27 females and because of this high mortality rate the top dose group was not included in statistical analysis. Outward signs of toxicity observed in BPA treated animals included rough coat piloerection alopecia pica excess salivation wet urogenital area dyspnea chromodacryorrhea tremors red-stained coat wheezing and vocalization. A statistically significant decrease in mean maternal body weight gain was observed in dams at all dose levels for the treatment period (35-54%) and the gestation period (11-14%). No effect was observed on gravid uterine weights. When maternal body weight gain was corrected for gravid uterine weight a statistically significant decrease was still apparent at all dose levels (26-34%). At necropsy no effect was observed on mean relative liver weight in dams. Pregnancy rates were not affected by treatment with BPA nor was there any effect on the number of implantation sites per litter % resorptions per litter number of live fetuses per litter sex ratio mean
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Morrissey R.E. George J.D. Price C.J. Tyl R.W. Marr M.C. and Kimmel C.A. 1987. The developmental toxicity of bisphenol A in rats and mice. Fundam. Appl. Toxicol. 8:571-582. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Duration of Test: 20 days Exposure Period: Days 6 through 15 of gestationControl Group: Concurrent vehicle In the main study two tests were performed and the data from both tests combined. Thus in total groups of 27-29 time-mated CD rats were gavaged with 0 160 320 640 or 1280 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were subjected to routine external visceral and skeletal examination.
Test Substance Purity	Bisphenol A
Type of Exposure	Gavage

Result Group

Component Name	**Value**
Concentration Result Type	NOAEL
Concentration Units	mg/kg bw/day
Concentration Value Description	>
Conclusion	No evidence of developmental toxicity in the rat was evident at exposure levels which are toxic to the mother. A maternal no effect level could not be identified; the LOAEL of 160 mg/kg based on clinical signs of toxicity and a statistically significant decrease (26%) in body weight gain was identified. No fetal effects were seen at the highest dose level evaluated 640 mg/kg.
Dose Remarks	0 160 320 640 or 1280 mg/kg/day
Exposure Period Units	Days
Frequency of Treatment	Daily
Gender	Female
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	No Data
Population	Fetal
Post-Exposure/Depuration Period Units	Days
Program Flag	HPVIS
Reliability	1
Results Remarks	Range-finding study: groups of 8 time-mated CD rats were gavaged with0 500 1000 1500 2000 2500 or 3000 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were examined for gross morphological abnormalities only. Deaths were observed in 1 5 3 and 5 rats at 1 500 2 000 2 500 and 3 000 mg/kg respectively. Clinical signs of toxicity were observed at all doses and included diarrhea lacrimation lethargy rough coat wheezing wet urogenital area arched back dyspnea bloody nose disorientation alopecia piloerection and vaginal bleeding. A statistically significant decrease in maternal body weight gain (24%) was observed at 1000 mg/kg and above during the gestation period and during the treatment period a decrease in maternal body weight was observed at 1500 mg/kg and above. No deaths were observed in the 0 160 320 and 640 mg/kg dose groups. At 1280 mg/kg deaths were observed in 7/27 females and because of this high mortality rate the top dose group was not included in statistical analysis. Outward signs of toxicity observed in BPA treated animals included rough coat piloerection alopecia pica excess salivation wet urogenital area dyspnea chromodacryorrhea tremors red-stained coat wheezing and vocalization. A statistically significant decrease in mean maternal body weight gain was observed in dams at all dose levels for the treatment period (35-54%) and the gestation period (11-14%). No effect was observed on gravid uterine weights. When maternal body weight gain was corrected for gravid uterine weight a statistically significant decrease was still apparent at all dose levels (26-34%). At necropsy no effect was observed on mean relative liver weight in dams. Pregnancy rates were not affected by treatment with BPA nor was there any effect on the number of implantation sites per litter % resorptions per litter number of live fetuses per litter sex ratio mean
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured

Study Reference	Morrissey R.E. George J.D. Price C.J. Tyl R.W. Marr M.C. and Kimmel C.A. 1987. The developmental toxicity of bisphenol A in rats and mice. Fundam. Appl. Toxicol. 8:571-582. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Duration of Test: 20 days Exposure Period: Days 6 through 15 of gestationControl Group: Concurrent vehicle In the main study two tests were performed and the data from both tests combined. Thus in total groups of 27-29 time-mated CD rats were gavaged with 0 160 320 640 or 1280 mg BPA/kg/day in corn oil on days 6 to 15 of gestation. Animals were sacrificed on day 20 of gestation and the fetuses were subjected to routine external visceral and skeletal examination.
Test Substance Purity	Bisphenol A
Type of Exposure	Gavage

NTP Developmental Toxicity Abstracts

Result Group

Component Name	Value
Mouse DevTox URL 1	*External Link*
Rat DevTox URL 1	*External Link*

NLM TOXNET DART

Result Group

Component Name	Value
TOXNET DART URL	*External Link*

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

UMD list of Acute Toxins, Teratogens, Carcinogens, or Mutagens

Result Group

Component Name	Value
Carcinogen	-> meets the University of Maryland definition of a Teratogen for the purpose of the Chemical Hygiene Plan. It was listed as a teratogen in the "Dangerous Properties of Industrial Materials", 7th Ed., by N. Irving Sax and Richard J. Lewis.

Reproductive Toxicity

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

EDSPDB Reproductive Toxicity Ranking

Result Group

Component Name	Value
RepDev_Abstract	Bisphenol A was evaluated for developmental toxicity in CD rats (0, 160, 320, or 640 mg/kg/day) and CD-1 mice (0, 500, 750, 1000, or 1250 mg/kg/day) dosed daily by gastric intubation on gestational days 6 through 15. Timed-pregnant dams were sacrificed 1 day prior to parturition, the uterine contents were examined, and all fetuses were examined for external, visceral, and skeletal malformations. In rats, maternal weight gain during gestation, weight gain corrected for gravid uterine weight, and weight gain during treatment were significantly reduced at all bisphenol A doses. Gravid uterine weight and average fetal body weight per litter were not affected by bisphenol A. No increase in percentage resorptions per litter or percentage fetuses malformed per litter was detected. In mice, maternal mortality occurred at all bisphenol A doses, reaching 18% at the high dose, which also produced a significant decrease in maternal body weight gain during gestation and treatment. Weight gain corrected for gravid uterine weight was not affected by bisphenol A. Reductions in gravid uterine weight and average fetal body weight were observed with the 1250 mg/kg dose of bisphenol A. Relative maternal liver weight was increased at all doses of bisphenol A. There was a significant increase in the percentage of resorptions per litter with 1250 mg bisphenol A/kg/day. Bisphenol A treatment at maternally toxic dose levels during organogenesis produced fetal toxicity in mice but not in rats and did not alter fetal morphologic development in either species. [Morrissey RE et al; Fund Appl Toxicol 8 (4): 571-82 (1987)] **PEER REVIEWED**
RepDev_AbsType	Non-Human Toxicity Excerpt
RepDev_Compartment	Developmental
RepDev_Condition	Pregnant
RepDev_DoseReg	Bisphenol A was evaluated for developmental toxicity in CD rats (0, 160, 320, or 640 mg/kg/day) and CD-1 mice (0, 500, 750, 1000, or 1250 mg/kg/day) dosed daily by gastric intubation on gestational days 6 through 15.
RepDev_Effect	There was a significant increase in the percentage of resorptions per litter with 1250 mg bisphenol A/kg/day. Bisphenol A treatment at maternally toxic dose levels during organogenesis produced fetal toxicity in mice but not in rats and did not alter fetal morphologic development in either species
RepDev_EffLevelRep	1250
RepDev_EffLevelUnits	mg/kg/day
RepDev_Endpoint	LOAEL
RepDev_Female	TRUE
RepDev_Final_Dose	1250
RepDev_Final_Units	mg/kg bw/day
RepDev_Male	FALSE
RepDev_Obs/Dose	gestational days 6 through 15
RepDev_Outcome	Positive
RepDev_Prim_Ref	Morrissey RE et al; Fund Appl Toxicol 8 (4): 571-82 (1987)

RepDev_Rank	333
RepDev_Reference	HSDB - 10/1999
RepDev_Route	gastric intubation
RepDev_Species	mice
RepDev_Strain	CD-1

Reproductive Toxicity Data In Vitro from EPA HPVIS

Result Group

Component Name	**Value**
Administration Method	In Food
Company Name	General Electric Company - Plastics
Concentration Result Type	NOAEL
Concentration Units	ppm
Concentration Value Description	=
Conclusion	Exposure to dietary BPA for three generations one litter per generation resulted in adult systemic toxicity only at 750 and 7500 ppm. Because of the lack of adverse effects below these doses the adult systemic toxicity NOAEL (no observable adverse effect level) was established at 75 ppm (equivalent to approximately 5 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. Similarly because there were no treatment- or dose-related reproductive or postnatal toxicity effects below 7500 ppm the reproductive and postnatal toxicity NOAELs were concluded to be 750 ppm (equivalent to approximately 50 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. There were no effects of BPA dietary exposure on any adult or offspring parameter at 0.015 0.3 4.5 or 75 ppm (resulting in BPA intakes of approximately 0.001 0.02 0.3 or 5 mg/kg/day respectively).
Dose Remarks	0 0.15 0.3 4.5 75 750 or 7500 ppm (0 0.001 0.02 0.3 5 50 or500 mg/kg/day)
Exposure Period Units	Weeks
Frequency of Treatment	ad libitum
Gender	Both M/F
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	OECD 416
Population	Parental (F0)
Program Flag	HPVIS
Reliability	1
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsored Chemical Result Type	Measured
Study Reference	R.W. Tyl Ph.D. DABT C.B. Myers M.S M.C. Marr B.A. LATG. 2000. Three-Generation Reproductive Toxicity Study of Dietary Bisphenol A in CD Sprague-Dawley Rats. RTI Report #: 65C-07036000. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Study Reference	2-Propanone reaction products with phenol
Submission Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	7500 ppm (approximately 500 mg/kg/day). Adult systemic toxicity (F0 F1 F2 and F3) was expressed as consistent and persistent reduced body weights and weight gains typically greater than 15% occasional reductions in feed consumption as g/day and occasional increases in feed consumption as g/kg/day. Food efficiency was occasionally reduced. For non-reproductive organs absolute organ weights were consistently reduced in both sexes while relative organ weights were commonly increased. Histopathologic findings on non-reproductive organs included increased incidence of renal tubular degeneration and chronic hepatic inflammation only in F0 F1 and F2 females (but not F3). There were no treatment- or dose-related direct effects on reproductive organ weights histopathology or function. Consistent with the reduced body weights and body weight gains in this group paired ovarian weights were significantly reduced for F0 F1 and F2 females (absolute and relative weights) and for F3 females (absolute weights only). Paired ovarian follicle counts (ten females each at 0 and 7500 ppm) were significantly increased at 7500 ppm in F0 females but were unaffected in F1 F2 and F3 females. There were no effects of treatment on any andrological parameters at any dose in any generation (except for significantly reduced epididymal sperm counts only in F1 males at 7500 ppm and for significantly reduced daily sperm production per testis but not efficiency of daily sperm production only in F3 males at 7500 ppm). The only reproductive effect was a significant decrease in total and live pups per litter (with no significant increase in prenatal postimplantation loss per litter) on pnd 0 and 4 (precull) for F1 F2 and F3 litters at 7500 ppm associated with reduced uterine weight in parental F0 F1 and F2 females. There were no effects on mating fertility or gestational indices on precoital interval gestational length offspring sex ratios or on nipple and/or areola retention in preweanling F1 F2 and F3 male pups. The only offspring effects at 7500 ppm included statistically significant reductions in pup body weights per litter beginning on pnd 7 for F1 F2 and F3 offspring and statistically significant delayed acquisition of both vaginal patency and preputial separation for F1 F2 and F3 postweanling pups. Anogenital distance (measured in F2 and F3 offspring on pnd 0) was unaffected for F2 and F3 males and for F3 females. Only F2 female anogenital distance was significantly increased by 0.03 mm at 0.015 0.3 and 4.5 ppm and by 0.04 mm at 750 ppm versus the control value. Although statistically significant these variations were only 0.03 to 0.04 mm and were considered to be due to the extremely precise measurement technique used and were not considered to be of biological or toxicological significance. These changes (referring to preputial separation vaginal patency and anogenital distance) did not affect reproductive function in the animals exhibiting them. The effects observed on reproductive function or postnatal toxicity were present in a clearly toxic dose (adult systemic toxicity) and were not observed at doses below 7500 ppm.

Test Methods	Exposure Period: F0 males: 15 weeks; F0 females: 18 weeksF1 & F2 males: 18 weeks; F1 & F2 females: 21 weeksF3 males & females: 13 weeksControl Group: Yes concurrent vehicle Test procedure: Exposure to bisphenol A began for the F0 generation atabout 7 weeks of age and continued throughout a 10-week pre-breed exposure period a 2-week mating period (when F0 animals were mated [one male and one female] within each dose group) and gestation. F0 males were sacrificed after the F1 delivery period. Exposure of F0 females to bisphenol A continued throughout lactation until weaning (post-natal day 21) when F0 animals were sacrificed. Selected F1 animals were similarly mated to produce the F2 generation and selected F2 animals were mated to produce the F3 generation. The same exposure regime was used for F1 and F2 animals with direct exposure to bisphenol A in the diet commencing approximately at post-natal day 21. Selected F3 animals were exposed to bisphenol A only for a 10-week period from weaning as they were not mated. For the F0 generation and retained F1 F2 and F3 animals clinical signs of toxicity body weights and food consumption were reported. Estrous cycles were monitored in the last 3 weeks of the pre-breed exposure period and during the mating period for all generations. At the necropsy of adult animals sperm samples were taken for analysis of epididymal sperm number motility (using a computer assisted sperm motion analysis system) and morphology testicular-resistant spermatid head counts daily sperm production and efficiency of daily sperm production a number of organs were weighed and selected organs were examined histopathologically. Parameters assessed in the young offspring included litter size body weights survival gross appearance anogenital distance (AGD) (in F2 and F3 offspring only) sexual development and for animals killed at weaning gross appearance of organs at necropsy with attention given to reproductive
Test Substance Purity	Bisphenol A (99.5% pure)

Result Group

Component Name	**Value**
Administration Method	In Food
Company Name	General Electric Company - Plastics
Concentration Result Type	NOAEL
Concentration Units	ppm
Concentration Value Description	=
Conclusion	Exposure to dietary BPA for three generations one litter per generation resulted in adult systemic toxicity only at 750 and 7500 ppm. Because of the lack of adverse effects below these doses the adult systemic toxicity NOAEL (no observable adverse effect level) was established at 75 ppm (equivalent to approximately 5 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. Similarly because there were no treatment- or dose-related reproductive or postnatal toxicity effects below 7500 ppm the reproductive and postnatal toxicity NOAELs were concluded to be 750 ppm (equivalent to approximately 50 mg/kg/day) in CD (Sprague-Dawley) rats under the conditions of this study. There were no effects of BPA dietary exposure on any adult or offspring parameter at 0.015 0.3 4.5 or 75 ppm (resulting in BPA intakes of approximately 0.001 0.02 0.3 or 5 mg/kg/day respectively).
Dose Remarks	0 0.15 0.3 4.5 75 750 or 7500 ppm (0 0.001 0.02 0.3 5 50 or500 mg/kg/day)
Exposure Period Units	Weeks
Frequency of Treatment	ad libitum
Gender	Both M/F
GLP	Yes
Mammalian Strain	Sprague-Dawley
Method/Guideline Followed	OECD 416
Population	Offspring (F1)
Program Flag	HPVIS
Reliability	1
Route of Administration	Oral
Species or in Vitro System	Rat
Sponsored Chemical Result Type	Measured
Study Reference	R.W. Tyl Ph.D. DABT C.B. Myers M.S M.C. Marr B.A. LATG. 2000. Three-Generation Reproductive Toxicity Study of Dietary Bisphenol A in CD Sprague-Dawley Rats. RTI Report #: 65C-07036000. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
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Test Substance Purity	Bisphenol A (99.5% pure)

Health Canada Priority Substance Lists (2006) (Reproductive Toxicity)

Result Group

Component Name	Value
Reproductive Toxicity	Reproductive Toxin

NTP Reproductive Toxicity Abstracts

Result Group

Component Name	Value
ReproTox URL 1	*External Link*
ReproTox URL 2	*External Link*

NTP Center for the Evaluation of Risks to Human Reproduction (CERHR)

Result Group

Component Name	Value
CERHR URL	*External Link*

NTP OHAT Evaluation of Risks to Human Reproduction (CERHR)

Result Group

Component Name	Value
Complete list of evaluation documents URL	*External Link*
NTP Monograph	NTP Monograph, September 2008

NLM TOXNET HSDB URL

Result Group

Component Name	Value
HSDB URL	*External Link*

Biomonitoring

Chemicals Biomonitored in California

Result Group

Component Name	Value
URL for Chemical Biomonitored in California	*External Link*

Project Results for Firefighter Occupational Exposures (FOX) Project

Result Group

Component Name	Value
25th	0.71799999999999997
50th	1.53
75th	3.16
95% Confidence Interval lower	1.25
95% Confidence Interval upper	1.99
95th	11.9
Chemical Group	Environmental Phenols
Detection Frequency	0.94099999999999995
Geometric mean	1.58
Indicates Exposure to	Bisphenol A
Limit of Detection (LOD), wet-weight	0.2
Measured in	Urine
Sample Collection Date	2010 to 2011
Units	g/L

Results for Maternal and Infant Environmental Exposure Project (MIEEP)

Result Group

Component Name	Value
25th	0.49
50th	1.27
75th	3.13
90th	4.8499999999999996
95% Confidence Interval lower	0.98399999999999999
95% Confidence Interval upper	1.58
Chemical Group	Environmental Phenols
Geometric mean (95% Confidence Interval)	1.25
Indicates Exposure to	Bisphenol A
Limit of Detection (LOD), wet-weight	0.2
Measured in	Urine
Sample Collection Date	2010 to 2011
Units	g/L

CDC Biomonitoring Summaries (URLs)

Result Group

Component Name	Value
CDC Biomonitoring Summary URL	*External Link*

EWG Human Toxome Project

Result Group

Component Name	Value
EWG Toxome URL	*External Link*

A snapshot of chemicals in doctors and nurses

Result Group

Component Name	Value
Anonymous/AK	
Anonymous/OR	0.72899999999999998
Aronberg/CA	1.85
Chan/AK	5.86
Chatham-Stehens/OR	1.46
Crane/NY	1.08
Falvo/NY	7.11
Lash/ME	2.27
Lerner/CA	2.63
Lundgren/MN	1.47
McDermott/WA	0.44900000000000001
Palfrey/MA	1.07
Perry/ME	1.39
Pomerleau/MA	1.58
Range	0.449-7.11
Redlich/CT	
Rosen/MN	2.0099999999999998
Squires/CT	
Units	g/L
Womack/MI	0.51600000000000001
Yancy/WA	0.75900000000000001

Occurrence

ASEAN Cosmetic Directive Annex II list of prohibited substances

Result Group

Component Name	Value
Status	substances which must not form part of the composition of cosmetic products

ASEAN Cosmetic Directive Annex II list of prohibited substances

Result Group

Component Name	Value
Ref. No.	1176

ATSDR: Substance Priority List 2011 Detailed Report

Result Group

Component Name	Value
Rank 2007	617
Rank Difference	-2

ATSDR: Substance Priority List 2011 Detailed Report

Result Group

Component Name	Value
Rank 2013	615
Rank Difference	2

CAL OCWD trace organics in Santa Ana River and comparison to Health Risk-Based Screening Levels

Result Group

Component Name	Value
Concentration, max.	ND
Concentration,min.	ND
Freq	0/4
Health Risk-Based DWEL	1800
lab	MWD & OCWD
Max (or MRL) > DWEL?	No
MRL	1
Source of DWEL	U.S. EPA (1993c) RfD; Snyder et al. (2008) ADI
Status	Non-Detected Compounds

Chemical Substances from Sanitary Napkins

Result Group

Component Name	Value
Sanitary napkin A	-
Sanitary napkin A - repeat of measurements	-
Sanitary napkin B	-
Sanitary napkin B - repeat of measurements	-
Sanitary napkin C	-
Sanitary napkin C - repeat of measurements	-
Sanitary napkin D	-
Sanitary napkin D - repeat measurements	-
Sanitary napkin D'	-
Sanitary napkin D' - repeat of measurements	-
Sanitary napkin E	-
Sanitary napkin E - repeat of measurements	-
Sanitary napkin E'	-
Sanitary napkin E' - repeat of measurements	-
Sanitary napkin F	-
Sanitary napkin F - repeat of measurements	-
Toxicological profile prepared	NO

Literature Survey for Substances which may be emitted from Electric and Electronic Equipment

Result Group

Component Name	Value
Electrical appliance I URL	*External Link*

Chemical Substances in Paper Handkerchiefs and Toilet Paper

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Survey and health assesment of chemicals substances in sex toys.

Result Group

Component Name	Value
Sex toys URL	*External Link*

Survey of chemical substances in headphones and hearing protection aids

Result Group

Component Name	Value
Headphones and hearing protection aids URL	*External Link*

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - Pacifiers

Result Group

Component Name	Value
Product type	Pacifier cover
Sample 5-1	1900
Sample 5-2	1700
Sample 5-3	1600
Sample 5-4	1000
Sample 5-5	1000

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - PacifiersI

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Sweat
Product type and number	5-1, Pacifier (coverage)
Quantitative analysis	106
Screening analysis	1900

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-1, Pacifier (coverage)

Result Group

Component Name	Value
Migration analysis	7*
Migration fluid	Sweat
Product type and number	5-3, Pacifier (coverage)
Quantitative analysis	280
Screening analysis	1600

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-3, Pacifier (coverage)

Intake Fraction Database

Result Group

Component Name	Value
Approximations	An open environmental system with landscape and climate parameters reflecting U.S. averages and population-based lifetime average exposure parameters (brething rates, diet, activity patterns, etc.). Mixing height 700m, simulated continuos release and multimedia dispersion lasts for 100 years, with exposure occuring during the last 70 years of the release. Do not account the variation of pollutant concentrations and population densities, and relationships between releases and food production regions or the movement of food between regions.
Exposure pathway	Inhalation, Ingestion, Dermal
Link to study	*External Link*
Location	U.S
Medium	Air
Method	CalTOX
Reference	Bennett, D.H.; Margni, M.D.; McKone, T.E.; Jolliet, O. (2002). Intake fractions for multimedia pollutants: A tool for life cycle analysis and comparative risk assessment. Risk Analysis 22, 905-918
Region Level	National
Source height	700m (mixing height)
Source of emissions	All sources
Target population	Whole population of the target area
Time	Lifetime
Type	Chemicals

Result Group

Component Name	Value
Approximations	An open environmental system with landscape and climate parameters reflecting U.S. averages and population-based lifetime average exposure parameters (brething rates, diet, activity patterns, etc.). Mixing height 700m, simulated continuos release and multimedia dispersion lasts for 100 years, with exposure occuring during the last 70 years of the release. Do not account the variation of pollutant concentrations and population densities, and relationships between releases and food production regions or the movement of food between regions.
Exposure pathway	Inhalation, Ingestion, Dermal
Link to study	*External Link*
Location	U.S
Medium	Water
Method	CalTOX
Reference	Bennett, D.H.; Margni, M.D.; McKone, T.E.; Jolliet, O. (2002). Intake fractions for multimedia pollutants: A tool for life cycle analysis and comparative risk assessment. Risk Analysis 22, 905-918

Region Level	National
Source of emissions	All sources
Target population	Whole population of the target area
Time	Lifetime
Type	Chemicals

EDSPDB Superfund Chemical Data

Result Group

Component Name	Value
CLPWater_Conc_Val_Max	32
CLPWater_Conc_Val_Mean	32
CLPWater_Conc_Val_Median	32
CLPWater_Conc_Val_Min	32
CLPWater_Distribution_Factor	1
CLPWater_Num_Mon_Stations	1
CLPWater_Num_Mon_Stat_Detected	1
CLPWater_Num_Regions	1
CLPWater_Num_Regions_Detected	1
CLPWater_Num_Samples_Detect	0
CLPWater_OVERALLRANK	68
CLPWater_Prevalance_Factor	1
CLPWater_RANKAVERAGE	143
CLPWater_RANKDIST	1
CLPWater_RANKMAX	203
CLPWater_RANKMEDIAN	93
CLPWater_RANKMIN	71
CLPWater_RANKPREV	1
CLPWater_Samplefactor	0
CLPWater_SUMOFRANKS	95
CLPWater_Unit	UG/L

Environment Canada National Pollutant Release Inventory 2007 Summary

Result Group

Component Name	Value
Disposal by Treatment	1.1
Off-site Disposal	8.3
On-site Disposal	no facility manufactured, processed, otherwise used or released the substance.
On-Site Releases to Air	0.126
On-Site Releases to Land	no facility manufactured, processed, otherwise used or released the substance.
On-Site Releases to Water	no facility manufactured, processed, otherwise used or released the substance.
Recycling	0.045
Substance group	1A
Substance group	Part 1A - Core Substances: Facilities need to report these substances if, in 2007, they were manufactured, processed or otherwise used at the facility in a quantity of 10 tonnes or more and employees (including contractors) worked 20,000 hours or more.
Total Disposal	9.4
Total On-Site Releases	0.127

EPA Mid-Atlantic Region Human Health Screening Levels

Result Group

Component Name	Value
Industrial Soil	31000
Industrial Soil Notes	n = noncancer
Residential Soil	3100
Residential Soil Notes	n = noncancer
Tap Water	580
Tap Water Screening Level Notes. c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User's Guide)	n = noncancer

EPA TRI Release levels for year 2009

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1391253.265478
Total On- and Off-site Disposal or Other Releases	1521727.8209780001
Total On-site Disposal or Other Releases	130474.5555

EPA TRI Release levels for year 2008

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1160299.3835
Total On-site Disposal or Other Releases	119343.261
TRI Total On- and Off-site Disposal or Other Releases	1279642.6444999999

EPA TRI Release levels for year 2007

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	978392.78

Total On- and Off-site Disposal or Other Releases	1122628.45
Total On-site Disposal or Other Releases	144235.67000000001

EPA TRI Release levels for year 2006

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1260167
Total On- and Off-site Disposal or Other Releases	1456997.13
Total On-site Disposal or Other Releases	196830.13

EPA TRI Release levels for year 2005

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1215898.5
Total On- and Off-site Disposal or Other Releases	1500210.64
Total On-site Disposal or Other Releases	284312.14

EPA TRI Release levels for year 2004

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1302764.3
Total On- and Off-site Disposal or Other Releases	1529783.68
Total On-site Disposal or Other Releases	227019.38

EPA TRI Release levels for year 2003

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1630091.58
Total On- and Off-site Disposal or Other Releases	1817488.81
Total On-site Disposal or Other Releases	187397.23

EPA TRI Release levels for year 2002

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	969235.53
Total On- and Off-site Disposal or Other Releases	1211189.3500000001
Total On-site Disposal or Other Releases	241953.82

EPA TRI Release levels for year 2001

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	921553
Total On- and Off-site Disposal or Other Releases	1107577.8473199999
Total On-site Disposal or Other Releases	186024.84732

EPA TRI Release levels for year 2000

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	957221
Total On- and Off-site Disposal or Other Releases	1177595.6956199999
Total On-site Disposal or Other Releases	220374.69562000001

EPA TRI Release levels for year 1999

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	965771
Total On- and Off-site Disposal or Other Releases	1182223.7044200001
Total On-site Disposal or Other Releases	216452.70441999999

EPA TRI Release levels for year 1998

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1054716
Total On- and Off-site Disposal or Other Releases	1376466.8405800001
Total On-site Disposal or Other Releases	321750.84058000002

EPA TRI Release levels for year 1997

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	881692
Total On- and Off-site Disposal or Other Releases	1068484.0864200001
Total On-site Disposal or Other Releases	186792.08642000001

EPA TRI Release levels for year 1996

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	324986
Total On- and Off-site Disposal or Other Releases	789963
Total On-site Disposal or Other Releases	464977

EPA TRI Release levels for year 1995

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	425671
Total On- and Off-site Disposal or Other Releases	755836
Total On-site Disposal or Other Releases	330165

EPA TRI Release levels for year 1994

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	398712
Total On- and Off-site Disposal or Other Releases	1042556
Total On-site Disposal or Other Releases	643844

EPA TRI Release levels for year 1992

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	377092
Total On- and Off-site Disposal or Other Releases	898842
Total On-site Disposal or Other Releases	521750

EPA TRI Release levels for year 1991

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	258129
Total On- and Off-site Disposal or Other Releases	1111746
Total On-site Disposal or Other Releases	853617

EPA TRI Release levels for year 1990

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	381314
Total On- and Off-site Disposal or Other Releases	1154881
Total On-site Disposal or Other Releases	773567

EPA TRI Release levels for year 1989

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	447782
Total On- and Off-site Disposal or Other Releases	1463363
Total On-site Disposal or Other Releases	1015581

EPA TRI Release levels for year 1988

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	444560
Total On- and Off-site Disposal or Other Releases	1223996
Total On-site Disposal or Other Releases	779436

EPA TRI on-site Release levels for the year 2001 by media

Result Group

Component Name	Value
On-site and Off-site Surface Water Discharges	5472
Total On-site and Off-site Air Emissions	151990.84732
Total On-Site Releases to Land	28385
Total On-Site Underground Injection	177

EPA TRI on-site Release levels for the year 2000 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6727
Total On-site Air Emissions	172729.69562000001
Total On-Site Releases to Land	40701
Total On-Site Underground Injection	217

EPA TRI on-site Release levels for the year 1999 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4798
Total On-site Air Emissions	171560.70441999999
Total On-Site Releases to Land	40022
Total On-Site Underground Injection	72

EPA TRI on-site Release levels for the year 1998 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	7681
Total On-site Air Emissions	190549.84057999999
Total On-Site Releases to Land	123520

Total On-Site Underground Injection	a zero in a cell denotes either that the facility reported "0" or "NA" in its Form R submission

EPA TRI on-site Release levels for the year 1997 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	3798
Total On-site Air Emissions	165125.08642000001
Total On-Site Releases to Land	17869
Total On-Site Underground Injection	a zero in a cell denotes either that the facility reported "0" or "NA" in its Form R submission

EPA TRI on-site Release levels for the year 1996 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4803
Total On-site Air Emissions	183427
Total On-Site Releases to Land	251747
Total On-Site Underground Injection	25000

EPA TRI on-site Release levels for the year 1995 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	5809
Total On-site Air Emissions	155659
Total On-Site Releases to Land	86697
Total On-Site Underground Injection	82000

EPA TRI on-site Release levels for the year 1994 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	18260
Total On-site Air Emissions	238008
Total On-Site Releases to Land	288392
Total On-Site Underground Injection	99184

EPA TRI on-site Release levels for the year 1993 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	8366
Total On-site Air Emissions	200667
Total On-Site Releases to Land	437289
Total On-Site Underground Injection	43210

EPA TRI on-site Release levels for the year 1992 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	7463
Total On-site Air Emissions	185789
Total On-Site Releases to Land	287498
Total On-Site Underground Injection	41000

EPA TRI on-site Release levels for the year 1991 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4492
Total On-site Air Emissions	430839
Total On-Site Releases to Land	375286
Total On-Site Underground Injection	43000

EPA TRI on-site Release levels for the year 1990 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6043
Total On-site Air Emissions	188247
Total On-Site Releases to Land	556277
Total On-Site Underground Injection	23000

EPA TRI on-site Release levels for the year 1989 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6879
Total On-site Air Emissions	228809
Total On-Site Releases to Land	779893
Total On-Site Underground Injection	either that the facility reported 0 or NA in its Form R submission

EPA TRI on-site Release levels for the year 1988 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	126385

Total On-site Air Emissions	226986
Total On-Site Releases to Land	426065
Total On-Site Underground Injection	either that the facility reported 0 or NA in its Form R submission

EUROPA Endocrine Disrupters in Drinking Water in 5 European countries

Result Group

Component Name	Value
drinking water concentrations	<LOQ - 0.12
number of waterworks EDCs found	1
number of waterworks EDCs monitored	5
raw water concentrations	<LOQ - 0.009

Minnesota Department of Health fact sheets

Result Group

Component Name	Value
fact sheet URL	*External Link*

Result Group

Component Name	Value
fact sheet URL	*External Link*

Concentration of organic wastewater chemicals in Minnesota surface water 2007-2008

Result Group

Component Name	Value
Concentration at 7 mile downstream - Average	12.1
Concentration at 7 mile midstream - Average	10.1
Concentration at 7 mile upstream	<10
Concentration at Budd Lake	37.9
Concentration at Cedar Lake	<10
Concentration at Elk Lake - Average	<10
Concentration at Lake Kabetogma - Average	<10
Concentration at Lake Owasso	25.6
Concentration at Le Suer R.	<10
Concentration at Little Cobb R. - Average	<10
Concentration at Northern Light Lake - Average	12.4
Concentration at Red Sand Lake - Average	<10
Concentration at Redwood R DS1 - Average	<10
Concentration at Redwood R DS2 - Average	<10
Concentration at Redwood R Upstream	53.8
Concentration at Redwood R WW eff - Average	<10
Concentration at Shingobee Lake	19.899999999999999
Concentration at Stewart Lake	20
Concentration at Sullivan Lake	<10
Concentration at Two Harbons - Average	45.6
Concentration at White Sand Lake	<10
Maximum Concentration 2002 Minnesota reconnaissance study	1.5
Maximum Concentration Mississippi River Study	2.76
Maximum Concentration Statewide EDC Study - lakes	0.0379
Maximum Concentration Statewide EDC Study - Rivers	0.054
Maximum Concentration Tributary Study	0.13700000000000001

Concentration of Polar organic chemicals in Minnesota lakes 2007-2008

Result Group

Component Name	Value
Concentration at Budd Lake	<10
Concentration at Cedar Lake	<10
Concentration at Elk Lake	<10
Concentration at Lake Kabetogma - Average	<10
Concentration at Lake Owasso	<10
Concentration at Northern Light Lake - Average	<10
Concentration at Red Sand Lake - Average	<10
Concentration at Shingobee Lake	<10
Concentration at Stewart Lake	<10
Concentration at Sullivan Lake	14
Concentration at Sullivan Lake - day 14	<10
Concentration at Sullivan Lake - day 21	<10
Concentration at Sullivan Lake - day 7	<10
Concentration at White Sand Lake	<10

Concentration of organic wastewater chemicals in Minnesota sediment 2007-2008

Result Group

Component Name	Value
Concentration at 7 mile downstream	ND
Concentration at 7 mile midstream	ND
Concentration at 7 mile upstream	ND
Concentration at Budd Lake	16.760000000000002
Concentration at Cedar Lake	ND
Concentration at Elk Lake	7.67
Concentration at Lake Kabetogma	15.53

Concentration at Lake Owasso	19.52
Concentration at Le Suer R.	3.55
Concentration at Little Cobb R.	4.04
Concentration at Northern Light Lake	3.11
Concentration at Red Sand Lake - Average	16.59
Concentration at Redwood R DS1 - Average	4.58
Concentration at Redwood R DS2 - Average	9.2799999999999994
Concentration at Redwood R WW eff - Average	ND
Concentration at Shingobee Lake	19.11
Concentration at Stewart Lake	ND
Concentration at Sullivan Lake	6.74
Concentration at Two Harbons - Average	3.4
Concentration at White Sand Lake	35.44
Maximum Concentration of organic wastewater compounds in lake sediment	19.52
Maximum Concentration of organic wastewater compounds in lake sediment	35.44
Maximum Concentration of organic wastewater compounds in lake sediment	7.67

Minnesota PCA Monitoring of Endocrine Disrupting Chemicals at Wastewater Treatment Plants

Result Group

Component Name	Value
Chemical Detected	Y
Compound type	Bisphenol A
maximum Concentration	22000 ppt
Medium Sampled	Water
Use	Organic Wastewater Compound

Result Group

Component Name	Value
Chemical Detected	Y
Compound type	Bisphenol A
maximum Concentration	310 ppb
Medium Sampled	Sediment
Use	Organic Wastewater Compound

Minnesota WWTP study in 2009 - bottom sediment samples

Result Group

Component Name	Value
Chemical type and analysis lab	Chemicals analyzed in Bottom Sediment at the USGS National Water Quality Laboratory
Notes for analytical results	<, less than; E, estimated; na, not analyzed; M, present in sample at concentrations less than reporting limits
Possible compound uses or sources	flame retardant, manuf. polycarbonate resins, antioxidant
units	ng/g

Result Group

Component Name	Value
Chemical type and analysis lab	Hormones Analyzed in Bottom Sediment at the USGS National Water Quality Laboratory
Notes for analytical results	<, less than; E, estimated; na, not analyzed; M, present in sample at concentrations less than reporting limits
Possible compound uses or sources	Plastic component
units	ng/g

Minnesota WWTP study in 2009 - water samples

Result Group

Component Name	Value
Chemical type and analysis lab	Chemicals Analyzed in Water at Larry Barber's USGS National Research Program Laboratory
Notes for analytical results	(1) Chemicals with and "E" following the number indicate a compound with low recovery, unstable instrument response, or reference standard prepared from a technical mixture for water analyses (Zaugg and others, 2006).
Possible compound uses or sources	FR, manuf. polycarbonate resins, antioxidant. FR = flame retardant
units	ng/L

Minnesota WWTP study in 2009 - water samples

Result Group

Component Name	Value
Austin WWTP outflow at Austin, Minn.	62
Cedar River above treatment plant at Austin, Minn.	230
Cedar River below treatment plant at Austin, Minn.	23
Center Creek below WWTP at Fairmont, Minn.	180
Center Creek on Co. Rd. 143, at Fairmont, Minn.	58
Chemical type	Alkylphenols in Water
East Grand Forks WWTP Outflow at East Grand Forks, MN	nd
Elbow Creek above Eveleth WWTP at Eveleth, Minn.	nd
Elbow Creek below Eveleth WWTP at Eveleth, Minn.	nd
Ely WWTP outflow at Ely, Minn.	84
Eveleth WWTP outlflow at Eveleth, Minn.	nd
Fairmont WWTP outflow at Fairmont, Minn.	150
Grand Rapids WWTP outflow at Grand Rapids, Minn	38
Grindstone River above WWTP near Hinckley, Minn.	nd
Grindstone River below Hinckley, Minn.	nd
Hinckley WWTP near Hinckley, Minn.	nd

Hutchinson WWTP outflow at Hutchinson, Minn.	65
Industrial WWTP outflow near Worthington, Minn.	nd
Jewitts Creek at U.S. Hwy. 12 in Litchfield, Minn.	nd
Jewitts Creek near Litchfield, Minn.	nd
Lake City WWTP outflow at Lake City, Minn.	50
Lake Superior in St. Louis Bay at Duluth, Minn.	3200
Lester Prairie WWTP outflow at Lester Prairie, Minn.	nd
Litchfield WWTP outflow near Litchfield, Minn.	nd
Luverne WWTP outflow near Luverne, Minn.	30
Lynd WWTP outflow near Lynd, Minn.	33
Marshall WWTP outfall at Marshall, Minn.	nd
Melrose WWTP outflow at Melrose, Minn.	31
Metro Plant (WWTP) outflow in St. Paul, Minn.	nd
Mississippi River (Lake Pepin) above Lake City, Minn.	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	80
Mississippi River below WWTP at Grand Rapids, Minn.	nd
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek below WWTP outflow at Worthington, Minn.	34
Pelican Rapids WWTP outflow at Pelican Rapids, Minn.	47
Pelican River above WWTP at Pelican Rapids, Minn.	nd
Pelican River below WWTP at Pelican Rapids, Minn.	nd
Red River of the North above WWTP at East Grand Forks, Minn.	28
Red River of the North below WWTP at East Grand Forks, Minn.	nd
Redwood River above Lynd WWTP near Lynd, Minn.	nd
Redwood River above WWTP below Marshall, Minn.	nd
Redwood River below Lynd WWTP near Lynd, Minn.	nd
Redwood River below WWTP near Marshall, Minn.	25
Rochester WWTP outflow at Rochester, Minn.	30
Rock River above WWTP near Luverne, Minn.	nd
Rock River below WWTP near Luverne, Minn.	nd
Sauk Centre WWTP outflow at Sauk Centre, Minn.	nd
Sauk River above Melrose WWTP at Melrose, Minn.	62
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	nd
Sauk River below Melrose WWTP at Melrose, Minn.	nd
Sauk River below Sauk Center WWTP at Sauk Centre, Minn.	nd
Shagawa Lake at Mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow River above WWTP at Lester Prairie, Minn..	nd
South Fork Crow River below WWTP at Lester Prairie, Minn.	nd
South Fork of the Crow River above WWTP at Hutchinson, Minn.	27
South Fork of the Crow River below Hutchinson, Minn	nd
South Fork Zumbro River at Rochester, Minn.	37
South Fork Zumbro River below WWTP near Rochester, Minn.	nd
Spring Valley Creek above Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley Creek below Spring Valley WWTP outflow at Spring Valley, Minn.	27
Spring Valley WWTP outflow at Spring Valley, Minn.	nd
St. Louis River at Hwy. 23 above Fond Du Lac, Minn.	nd
Tibbets Brook above WWTP outflow at Zimmerman, Minn.	nd
Tibbets Brook below WWTP outflow at Zimmerman, Minn.	91
units	(ng/L)
Western Lake Superior Sanitary District - WWTP at Duluth, Minn.	22000
Williams Creek above WWTP at Williams, Minn.	nd
Williams Creek below WWTP at Williams, Minn.	25
Williams WWTP outflow at Williams, Minn.	nd
Worthington WWTP outflow at Worthington, Minn.	nd
Zimmerman WWTP outflow at Zimmerman, Minn.	170

Result Group

Component Name	**Value**
Austin WWTP outflow at Austin, Minn.	nd
Cedar River above treatment plant at Austin, Minn.	nd
Cedar River below treatment plant at Austin, Minn.	6200
Center Creek below WWTP at Fairmont, Minn.	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type	Hormones in Water
East Grand Forks WWTP Outflow at East Grand Forks, MN	nd
Elbow Creek above Eveleth WWTP at Eveleth, Minn.	nd
Elbow Creek below Eveleth WWTP at Eveleth, Minn.	nd
Ely WWTP outflow at Ely, Minn.	220
Eveleth WWTP outlflow at Eveleth, Minn.	nd
Fairmont WWTP outflow at Fairmont, Minn.	47.5
Grand Rapids WWTP outflow at Grand Rapids, Minn	nd
Grindstone River above WWTP near Hinckley, Minn.	nd

Grindstone River below Hinckley, Minn.	nd
Hinckley WWTP near Hinckley, Minn.	nd
Hutchinson WWTP outflow at Hutchinson, Minn.	nd
Industrial WWTP outflow near Worthington, Minn.	nd
Jewitts Creek at U.S. Hwy. 12 in Litchfield, Minn.	nd
Jewitts Creek near Litchfield, Minn.	nd
Lake City WWTP outflow at Lake City, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	5000
Lester Prairie WWTP outflow at Lester Prairie, Minn.	nd
Litchfield WWTP outflow near Litchfield, Minn.	nd
Luverne WWTP outflow near Luverne, Minn.	nd
Lynd WWTP outflow near Lynd, Minn.	nd
Marshall WWTP outfall at Marshall, Minn.	nd
Melrose WWTP outflow at Melrose, Minn.	nd
Metro Plant (WWTP) outflow in St. Paul, Minn.	nd
Mississippi River (Lake Pepin) above Lake City, Minn.	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	nd
Mississippi River at Industrial Mollasses, St. Paul, Minn.	130
Mississippi River below WWTP at Grand Rapids, Minn.	nd
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek below WWTP outflow at Worthington, Minn.	nd
Pelican Rapids WWTP outflow at Pelican Rapids, Minn.	45.52
Pelican River above WWTP at Pelican Rapids, Minn.	nd
Pelican River below WWTP at Pelican Rapids, Minn.	nd
Red River of the North above WWTP at East Grand Forks, Minn.	nd
Red River of the North below WWTP at East Grand Forks, Minn.	nd
Redwood River above Lynd WWTP near Lynd, Minn.	nd
Redwood River above WWTP below Marshall, Minn.	89.68
Redwood River below Lynd WWTP near Lynd, Minn.	nd
Redwood River below WWTP near Marshall, Minn.	nd
Rochester WWTP outflow at Rochester, Minn.	49.7
Rock River above WWTP near Luverne, Minn.	nd
Rock River below WWTP near Luverne, Minn.	nd
Sauk Centre WWTP outflow at Sauk Centre, Minn.	nd
Sauk River above Melrose WWTP at Melrose, Minn.	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	nd
Sauk River below Melrose WWTP at Melrose, Minn.	nd
Sauk River below Sauk Center WWTP at Sauk Centre, Minn.	nd
Shagawa Lake at Mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow River above WWTP at Lester Prairie, Minn..	nd
South Fork Crow River below WWTP at Lester Prairie, Minn.	nd
South Fork of the Crow River above WWTP at Hutchinson, Minn.	nd
South Fork of the Crow River below Hutchinson, Minn	nd
South Fork Zumbro River at Rochester, Minn.	48.78
South Fork Zumbro River below WWTP near Rochester, Minn.	nd
Spring Valley Creek above Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley Creek below Spring Valley WWTP outflow at Spring Valley, Minn.	nd
Spring Valley WWTP outflow at Spring Valley, Minn.	nd
St. Louis River at Hwy. 23 above Fond Du Lac, Minn.	nd
Tibbets Brook above WWTP outflow at Zimmerman, Minn.	nd
Tibbets Brook below WWTP outflow at Zimmerman, Minn.	200
units	(ng/L)
Western Lake Superior Sanitary District - WWTP at Duluth, Minn.	1200
Williams Creek above WWTP at Williams, Minn.	nd
Williams Creek below WWTP at Williams, Minn.	nd
Williams WWTP outflow at Williams, Minn.	nd
Worthington WWTP outflow at Worthington, Minn.	nd
Zimmerman WWTP outflow at Zimmerman, Minn.	470

Minnesota WWTP study in 2009 - bottom sediment samples

Result Group

Component Name	**Value**
Center Creek Below Wastewater Treatment Plant (WWTP) At Fairmont, MN	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type and analysis lab	Organic Waste Compounds in Sediment
Grindstone River Above Wwtp Near Hinckley, MN	70
Grindstone River below Hinckley, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	310
Metro Plant (Wastewater Treatment Plant (WWTP)) Outflow In St. Paul, MN	90
Mississippi River (Lake Pepin) Above Lake City, MN	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	190
Mississippi River at Industrial Mollasses St. Paul, Minn.	60

Mississippi River at South St. Paul, Minn.	nd
Mississippi River Below Wastewater Treatment Plant (WWTP) At Grand Rapids, MN	40
Okabena Creek above WWTP outflow at Worthington, Minn.	nd
Okabena Creek Below Wastewater Treatment Plant (WWTP) Outflow At Worthington,MN	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	80
Sauk River Below Melrose Wastewater Treatment Plant (WWTP) At Melrose, MN	nd
Sauk River Blw Sauk Centre Wastewater Treatment Plant (WWTP) At Sauk Centre, MN	nd
Shagawa Lake at mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow R. Blw Wastewater Treatment Plant (WWTP) At Lester Prairie, MN	110
South Fork Crow River above WWTP at Lester Prairie, Minn.	nd
South Fork Crow River Below Hutchinson, MN	40
South Fork of the Crow River above WWTP at Hutchinson, Minn.	70
St. Louis River at Hwy 23 above Fond Du Lac, Minn.	100
units	(ng/g)

Result Group

Component Name	Value
Center Creek Below Wastewater Treatment Plant (WWTP) At Fairmont, MN	nd
Center Creek on Co. Rd. 143, at Fairmont, Minn.	nd
Chemical type and analysis lab	Hormones in Sediment
Grindstone River Above Wwtp Near Hinckley, MN	34.9
Grindstone River below Hinckley, Minn.	nd
Lake Superior in St. Louis Bay at Duluth, Minn.	213
Metro Plant (Wastewater Treatment Plant (WWTP)) Outflow In St. Paul, MN	54.3
Mississippi River (Lake Pepin) Above Lake City, MN	nd
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	nd
Mississippi River above WWTP at Grand Rapids, Minn.	170
Mississippi River at Industrial Mollasses St. Paul, Minn.	14
Mississippi River at South St. Paul, Minn.	14.1
Mississippi River Below Wastewater Treatment Plant (WWTP) At Grand Rapids, MN	50.9
Okabena Creek above WWTP outflow at Worthington, Minn.	11.8
Okabena Creek Below Wastewater Treatment Plant (WWTP) Outflow At Worthington,MN	nd
Sauk River above Melrose WWTP at Melrose, Minn.	nd
Sauk River above Sauk Centre WWTP at Sauk Centre, Minn.	73.900000000000006
Sauk River Below Melrose Wastewater Treatment Plant (WWTP) At Melrose, MN	nd
Sauk River Blw Sauk Centre Wastewater Treatment Plant (WWTP) At Sauk Centre, MN	25.4
Shagawa Lake at mouth of Burntside River near Ely, Minn.	nd
Shagawa Lake near Ely WWTP outflow at Ely, Minn.	nd
South Fork Crow R. Blw Wastewater Treatment Plant (WWTP) At Lester Prairie, MN	67.900000000000006
South Fork Crow River above WWTP at Lester Prairie, Minn.	17.399999999999999
South Fork Crow River Below Hutchinson, MN	154
South Fork of the Crow River above WWTP at Hutchinson, Minn.	nd
St. Louis River at Hwy 23 above Fond Du Lac, Minn.	158
units	(ng/g)

Endocrine Active Chemicals and Other Contaminants of Emerging Concern in Minnesota's Groundwater, 2009-2010

Result Group

Component Name	Value
Chemical group	Hormones and other chemicals analyzed in water samples
Maximum concentration in groundwater measured in this study	4.41 g/L
Method reporting level	100 ng/L
Notes	(1) The Minnesota Department of Health is currently (2012) reevaluating this HBV.
Source or use	Plasticizer

Screening of phenolic substances in the Nordic environments 2006/2007

Result Group

Component Name	Value
Summary results for biological samples - Egg, seabird	6-9
Summary results for biological samples - marine fish	<10
Summary results for biological samples - Mussels, marine/non-marine	<1-3
Summary results for biological samples - non-marine fish	<1-57
Summary results for solid samples - Landfill soil	<0.1-3
Summary results for solid samples - Sediment, marine	<0.1-74
Summary results for solid samples - Sediment, non-marine	<0.1-40
Summary results for solid samples - STP sludge	<0.4-1914
Summary results for water samples - Background, marine/fresh	<1-11
Summary results for water samples - Landfill Effluent	711-5,910
Summary results for water samples - Recipient, marine/fresh	<1-22
Summary results for water samples - Sewage Treatment Plant (STP) effluent	<1-561
Summary results for water samples - Sewage Treatment Plant (STP) influent/sewage	204-9,828

Summary results for water samples - Surface runoff	<1-5,910

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Groundwater

Result Group

Component Name	Value
Source for MSCs for non-Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for non-Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for non-Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap
Source for MSCs for Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Soil: Direct Contact Values.

Result Group

Component Name	Value
Source for MSCs for Non-Residential Soil, Sub-Surface Soil, 2-15 feet	C = Cap
Source for MSCs for Non-Residential Soil, Surface soil, 0-2 feet	G = Ingestion
Source for MSCs for Residential Soil, 0 - 15 feet	G = Ingestion

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Soil: Soil-Groundwater

Result Group

Component Name	Value
100x GW MSC for non-Residential non-use aquifers	12000
100x GW MSC for non-Residential used aquifers where TDS <= 2500	510
100x GW MSC for non-Residential used aquifers where TDS >2500	12000
100x GW MSC for Residential non-use aquifers	12000
100x GW MSC for Residential used aquifers where TDS >2500	12000
100x GW MSC for Residential used aquifers where TDS <= 2500	180
generic value for non-Residential non-use aquifers	46000
generic value for non-Residential used aquifers where TDS <= 2500	2000
generic value for non-Residential used aquifers where TDS >2500	46000
generic value for Residential non-use aquifers	46000
generic value for Residential used aquifers where TDS <= 2500	700
generic value for Residential used aquifers where TDS >2500	46000
Soil buffer distance	20
Source for generic value for non-Residential non-use aquifers	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for non-Residential used aquifers where TDS <= 2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for non-Residential used aquifers where TDS >2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential non-use aquifers	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential used aquifers where TDS <= 2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential used aquifers where TDS >2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law

Household Chemicals and Drugs Found in Biosolids (USGS)

Result Group

Component Name	Value
Chemical Class	fire retardant
Median concentration	4,690

Organic compounds found in water in Minn. (USGS)

Result Group

Component Name	Value
Analytical method	Household, industrial, and agricultural use-compounds
Frequency of detection (%)	17.9
Frequency of detection (%)	3,4
Maximum concentration	26
Method reporting limit	1
Minimum concentration	0.084

Compounds included in USGS Source Water-Quality Assessment (SWQA) studies

Result Group

Component Name	Value
Chemical Class	Manufacturing additives
References	Zaugg and others, 2002; Glassmeyer and others, 2005; U.S. National Library of Medicine, 2006
Secondary uses or sources	Used in manufacture of plastic and polycarbonate resins

USGS Study of WWCs in Milwaukee 2004-2005

Result Group

Component Name	Value
Detection Frequency	0
endocrine-disrupting chemicals (EDCs)	YES
Maximum	Not Detected
Median	Not Detected
Possible compound uses or sources	Manufacturing polycarbonate resins, antioxidant, flame retardant
Reporting level (g/L)	1

WWC Class	Antioxidants
WWC Group	Group 1

Detailed USGS Health-Based Screening Levels (HBSLs)

Result Group

Component Name	Value
Cancer Class	NAV
Cancer Class Date	NAV
Cancer Class Source	NAV
Chemical Class	Emerging contaminant
HBSL Basis	HBSL calculated using OW formula for Lifetime HA
HBSL Date	38707
High end of HBSL range corresponding to one in ten thousand cancer risk	400
Low end of HBSL range corresponding to one in one million cancer risk	400
New Benchmark?	Y
Toxicity Value	0.05
Toxicity Value Date	32253
Toxicity Value Source	IRIS
Toxicity Value Type	RfDo
Toxicity Value Web Reference (URL)	*External Link*

USGS Target National Reconnaissance of Emerging Contaminants (NREC) project in US Streams

Result Group

Component Name	Value
Analytical Method	Method 4 targets 46 OWCs - continuous liquid-liquid extraction (CLLE) with capillary gas chromatography/mass spectrometry (GC/MS) analysis
Chemical Class	OtherWastewater-RelatedCompounds
Comment	Pimephales promelas(fathead minnow) ' 96 h exposure LC50
Compounds suspected of being hormonally active	Compound suspected of being hormonally active
lowest LC50 for the most sensitive indicator species (g/L)/no. of aquatic studies identified	3600/26
max (g/L)	12
MCL or HAL	Not Available
median (g/L)	0.14000000000000001
Use	plasticizer

USGS Target National Reconnaissance of Emerging Contaminants (NREC) project in US Streams

Result Group

Component Name	Value
Analytical Method	CLLE SIM GC/MS, continuous liquid"liquid extraction with gas chromatography and mass spectroscopy using selected selected-ion monitoring.
Chemical Class	Other wastewater-related compounds
max (g/L)	2.5499999999999998
Typical Use	Manufacturing additive, used in plastics

USGS Target National Reconnaissance of Emerging Contaminants (NREC) project

Result Group

Component Name	Value
Analytical Method	CLLE GC/MS, continuous liquid"liquid extraction with gas chromatography and mass spectroscopy
Chemical Class	Other wastewater-related
max (g/L)	1.9
Use	manufacturing additive, used in plastics

USGS NAWQA highest priority chemicals for Cycle 3 monitoring

Result Group

Component Name	Value
Constituent group(s)	F, I
explanation for Constituent group(s)	lipophilic organic compounds in sediment (F); wastewater-indicator and industrial compounds in water (I)
Tier for sediment	1
Tier for water	1

USGS Lipophilic Organic Compounds (LOCs) for monitoring in Sediment in Cycle 3

Result Group

Component Name	Value
Aquatic-life bin	1
Chemical Detail	Phenol
Compound monitored in NAWQA Cycle 1?	No
NTAS Tier for sediment	1
Screening pathway	P4
Subgroup	F-9
Subgroup Name	Alkylphenols, alkylphenol ethoxylates, and other phenols

USGS substances for monitoring in Cycle 3

Result Group

Component Name	Value
Constituent group(s)	F, I
Explanation for Constituent group(s)	lipophilic organic compounds in sediment (F); wastewater-indicator and industrial compounds in water (I)

Priority	1
Priority	1

USGS Report: Sampling of surface water in Colorado and Iowa in 2003

Result Group

Component Name	Value
BC-D3.6	<0.005
BC-D5.0	<0.005
BC-D7.4	0.006
BC-E	<0.005
BC-U	<0.005
Compound type	neutral organic wastewater compound determined by continuous liquid-liquid extraction
FC-D0.4	<0.005
FC-D10.6	<0.005
FC-D2.9	<0.005
FC-D8.4	<0.005
FC-E	<0.005
FC-U	<0.005
LRL	0.005
units	ug/L

Result Group

Component Name	Value
BC-D3.6	<0.005
BC-D5.0	0.005
BC-D7.4	0.006
BC-E	<0.005
BC-U	0.005
Compound type	neutral organic wastewater compound determined by continuous liquid-liquid extraction
FC-D0.4	<0.005
FC-D10.6	0.009
FC-D2.9	0.015
FC-D8.4	0.017
FC-E	<0.005
FC-U	--
LRL	0.005
units	ug/L

Result Group

Component Name	Value
BC-D3.6	E0.11
BC-D5.0	E0.12
BC-D7.4	E0.11
BC-E	E0.16
BC-U	<1.0
Compound type	neutral organic wastewater compound determined by solid-phase extraction
FC-D0.4	--
FC-D10.6	--
FC-D2.9	--
FC-D8.4	--
FC-E	--
FC-U	--
LRL	1
units	ug/L

USGS Report: Sampling of surface water in Colorado and Iowa in 2005

Result Group

Component Name	Value
BC-D3.6	0.015
BC-D7.4	0.083
BC-E	0.14000000000000001
BC-U	0.032
Compound type	neutral organic wastewater compound determined by continuous liquid-liquid extraction
FC-D2.9	<0.005
FC-D8.4	0.005
FC-E	0.01
FC-U	<0.005
LRL	0.005
units	g/L

Result Group

Component Name	Value
BC-D3.6	0.054
BC-D7.4	0.006
BC-E	0.033
BC-U	0.023
Compound type	neutral organic wastewater compound determined by continuous liquid-liquid extraction
FC-D2.9	0.005

FC-D8.4	<0.005
FC-E	<0.005
FC-U	<0.005
LRL	0.005
units	g/L

Result Group

Component Name	Value
BC-D3.6	M
BC-D7.4	<1
BC-E	M
BC-U	<1
Compound type	neutral organic wastewater compound determined by solid-phase extraction
FC-D2.9	<1
FC-D8.4	<1
FC-E	E0.1
FC-U	<1
LRL	1
units	g/L

Result Group

Component Name	Value
BC-D3.6	<1
BC-D7.4	M
BC-E	M
BC-U	<1
Compound type	neutral organic wastewater compound determined by solid-phase extraction
FC-D2.9	--
FC-D8.4	<1
FC-E	<1
FC-U	<1
LRL	1
units	g/L

Properties of endocrine-active chemicals and other organic chemicals monitored by USGS in three rivers in Minnesota in 2007

Result Group

Component Name	Value
Classification	USGS-NRP wastewater indicators (ng/L)
Endocrine disrupting potential (EDP)	K
MRL	5
Possible compound uses or sources	FR, manuf. polycarbonate resins, antioxidant.

USGS Study of endocrine-active chemicals and other organic chemicals indicative of wastewater in sediments of rivers in Minnesota

Result Group

Component Name	Value
Grindstone River below Hinckley, MN	<5.0
Grindstone River near Hinckley, MN	<5.0
North Branch Grindstone River near Hinckley, MN	<5.0
Redwood River at 280th Ave. near Marshall, MN	<5.0
Redwood River below WWTP near Marshall, MN	<5.0
Redwood River near Marshall, MN	<5.0
South Branch Grindstone River near Hinckley, MN	<5.0
South Branch Grindstone River near Hinckley, MN (replicate sample)	<5.0
South Fork Crow River above Otter Lake near Hutchinson, MN	<5.0
South Fork Crow River at Hwy. 22 near Biscay, MN	<5.0
South Fork Crow River below Hutchinson, MN	<5.0
Units	ng/g

Properties of endocrine-active chemicals and other organic chemicals monitored by USGS in sediments of three rivers in Minnesota

Result Group

Component Name	Value
Possible compound uses or sources	Plasticizer.

USGS Report: 2001 Water Quality Assessment near Flandreau, SD - Organic wastewater compounds

Result Group

Component Name	Value
Concentration	1
Possible compound uses or sources	Manufacturing polycarbonate resins, antioxidant, flame retardant
SED	No

USGS Report on organic contaminants in the Columbia River Basin 2008-2010

Result Group

Component Name	Value
compound type	Plasticizers
detection in wastewater-treatment-plant effluent in this study	X
Endocrine Disrupting Potential	K
Method detection limit	0.22
Parameter code	62816
Possible compound uses or sources	Manufacturing of polycarbonate resins, antioxidant, flame retardant
Reporting Limit	0.4

USGS Report on organic contaminants in the Columbia River Basin 2008-2010

Result Group

Component Name	Value
Longview	0.57999999999999996
Portland (p.m.)	ND
St. Helens	Present
The Dalles	ND
Vancouver	Present
Wenatchee 2008	Present
Wenatchee 2009	Present

Pharmaceuticals and personal care products in Washington state wastewater treatment plants

Result Group

Component Name	Value
Chambers Creek	6850
Chemical Group	Semi-Volatile Organics
Classification	Plastic products, epoxy resin, flame retardant, fungicide
Lott	58700
Puyallup	32100

Washington indicators of potential exposure

Result Group

Component Name	Value
Biomonitoring	YES
Children's Products	YES
Drinking Water	YES
General Products	YES
Indoor Air	YES

Washington Children's Safe Product Act (CSPA) Reporting Rule. List of chemical of high concern to children (CHCC) which must be reported in children's products.

Result Group

Component Name	Value
Applicable Washington Administrative Code (WAC) section	WAC 173-334-140

List of chemical of high concern to children (CHCC)

Result Group

Component Name	Value
summary of toxicity and exposure information for that chemical, prepared by the Washington State Department of Health URL	*External Link*

PPCPs in reclaimed water in Washington

Result Group

Component Name	Value
Chemical Group	PPCPs Analyzed by EPA Method 1694.List 3 - Acid Extraction in Negative Ionization
Fall reporting limit	783 - 1100
Spring Reporting limit	1420 - 2080

Chemicals Analyzed for Loading Studies for Puget Sound

Result Group

Component Name	Value
Ocean exchange	X
Publically-owned treatment works	X
Surface Runoff	A

Non-regulatory Risk Management

California Department of Public Health (DPH) information for submission of analytical results for required testing of drinking water (DW)

Result Group

Component Name	Value
Reporting Units	g/L
Storet No. or Assigned ID No.	81651

CAL OCWD trace organics in Santa Ana River and comparison to Health Risk-Based Screening Levels

Result Group

Component Name	Value
Concentration, max.	ND
Concentration,min.	ND
Freq	0/4
Health Risk-Based DWEL	1800
lab	MWD & OCWD
Max (or MRL) > DWEL?	No
MRL	1
Source of DWEL	U.S. EPA (1993c) RfD; Snyder et al. (2008) ADI
Status	Non-Detected Compounds

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

CheLIST combination of 2 files from JRC Projects list

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	JRC METABOLISM BIOACCUMULATION
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	JRC HEPATOTOX
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from EU Reseearch lists

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	DGENV EAS
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	FP6 ReProTect
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

DanishEPA List of Undesirable Substances

Result Group

Component Name	Value
Chemical group	Alkylphenols and alkylphenol ethoxylates

DanishEPA List of Undesirable Substances for 2009

Result Group

Component Name	Value
Activity/further information	The use of bisphenol A as an industrial chemical has been evaluated under the regulation for existing substances 793/93/EEC (which has been replaced by REACH) by the EU technical committee for new and existing substances in April 2008. The committee concluded that the current use of bisphenol A does not pose a risk for consumers and that there is thus no basis for further measures to reduce the risk associated with the use of the substance. The EU's risk assessment of bisphenol A in 2008 further concluded that 99.4% of the population's exposure to bisphenol A arises from materials that are in contact with foodstuffs. For workers involved in the production of bisphenol A and the production of epoxy resin containing bisphenol A, a risk of toxicity with repeated exposure was identified, as well as reproductive toxicity. With regard to the environment, studies of effects on snails are to be included when they become available. There was no further risk identified in connection with the current use of bisphenol A. There continues to be wide disagreement in scientific circles however on the role of bisphenol A in hormone disruption. An industry study illustrating bisphenol A's effect on the development of the brain during exposure at low levels is being evaluated by the EU food agency EFSA. In view of the ongoing evaluation of the study by the Danish National Food Institute, an interim prohibition has been laid down against the use of bisphenol A in food contact materials for 0-3 year olds. EFSA's evaluation is expected to be completed in the spring of 2010. There are several different bisphenols some of which have shown similar effects in trials, but they are generally not as well investigated as bisphenol A. Other bisphenols with the same effects as bisphenol A are similarly undesirable: before substitution for bisphenol A, bisphenol alternatives should therefore be further investigated to see if they have similar effects.
Alternate name	4,4'-Isopropylidendiphenol
Classification	Rep3;R62 R43 Xi;R37-41 R52
Classification under CLP Regulation:	Repr. 2 STOT SE 3 Eye Dam. 1 Skin Sens. 1; H361f*** H335 H318 H317
Product groups/functions	Monomer in polycarbonate plastics and epoxy resins. Bisphenol A is a building block in polycarbonate plastics and bisphenol A content in polycarbonate is due to residual unreactive monomers.
Reason for selection	Properties of concern according to the 'List of hazardous substances'. Bisphenol A and bisphenol B are on the EU 'Priority list of substances for further evaluation of their role in endocrine disruption.' Bisphenol is the subject of particular focus in Denmark

Chemical Substances from Sanitary Napkins

Result Group

Component Name	Value
Sanitary napkin A	-
Sanitary napkin A - repeat of measurements	-
Sanitary napkin B	-

Sanitary napkin B - repeat of measurements	-
Sanitary napkin C	-
Sanitary napkin C - repeat of measurements	-
Sanitary napkin D	-
Sanitary napkin D - repeat measurements	-
Sanitary napkin D'	-
Sanitary napkin D' - repeat of measurements	-
Sanitary napkin E	-
Sanitary napkin E - repeat of measurements	-
Sanitary napkin E'	-
Sanitary napkin E' - repeat of measurements	-
Sanitary napkin F	-
Sanitary napkin F - repeat of measurements	-
Toxicological profile prepared	NO

Literature Survey for Substances which may be emitted from Electric and Electronic Equipment

Result Group

Component Name	Value
Electrical appliance I URL	*External Link*

Chemical Substances in Paper Handkerchiefs and Toilet Paper

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Survey and health assesment of chemicals substances in sex toys.

Result Group

Component Name	Value
Sex toys URL	*External Link*

Survey of chemical substances in headphones and hearing protection aids

Result Group

Component Name	Value
Headphones and hearing protection aids URL	*External Link*

Exposure of 2-year-olds to chemical substances in Consumer Products.

Result Group

Component Name	Value
SOURCE	Pacifiers

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - Pacifiers

Result Group

Component Name	Value
Product type	Pacifier cover
Sample 5-1	1900
Sample 5-2	1700
Sample 5-3	1600
Sample 5-4	1000
Sample 5-5	1000

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - PacifiersI

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Sweat
Product type and number	5-1, Pacifier (coverage)
Quantitative analysis	106
Screening analysis	1900

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-1, Pacifier (coverage)

Result Group

Component Name	Value
Migration analysis	7*
Migration fluid	Sweat
Product type and number	5-3, Pacifier (coverage)
Quantitative analysis	280
Screening analysis	1600

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-3, Pacifier (coverage)

Delaware DNREC-SIRS reporting levels (RLs) for hazardous or potentially hazardous conditions that exist during remediation (2014)

Result Group

Component Name	Value
carcinogrnic or noncarcinogen	n
Key for soil reporting Level	RSL: EPA Regional Screening Level from May 2014 (with TR = 1E-06 and THQ = 1)
Soil reporting level	3100

Delaware DNREC SIRS Cleanup Standard, screening level tables

Result Group

Component Name	Value
carcinogrnic or noncarcinogen	n
Ecological Sediment ,Marine Screening Level	---
Ecological Sediment Fresh screening level	---
Ecological Surface Water ,Fresh, screening level	---
Ecological Surface Water, Marine, screening level	---
Ecological, Surface Soil, screening level	---
Ground water screening level	77
Key for Ground water screening level	RSL = EPA Regional Screening Level from May 2014 (with TR= 1E-06 and THQ= 0.1)
Key for soil screening Level	RSL = EPA Regional Screening Level from May 2014 (with TR= 1E-06 and THQ= 0.1)
Soil screening level	310
Sub-Slab Gas and Soil Gas screening level	---

US Army Military exposure guidelines (MEGs) for Short-Term exposures to chemicals in ambient air

Result Group

Component Name	Value
1 hour Critical Air MEG	5.0E+02
1 hour Marginal Air MEG	1.0E+02
1 hr Negligible air MEG	1.5E+01

US Army Military exposure guidelines (MEGs) for water

Result Group

Component Name	Value
1-year negligible MEGs for water at 15 L/day	2.30E+00
1-year negligible MEGs for water at 5 L/day	7.00E+00

US Army Military exposure guidelines (MEGs) for soil

Result Group

Component Name	Value
1-year Negligible MEGs for soil	1.10E+05

DOE: Pertinent physical constants for Protective Action Criteria (PAC) Chemicals

Result Group

Component Name	Value
Boiling Point	220 @ 4mmHg
Molec. Formula	C15H16O2
MP or FP (C)	153
PAC-TEEL Derivation/Review/Revision Dates: Last Reviewed	04/14/09
PAC-TEEL Derivation/Review/Revision Dates: Last Revised	12/31/11
PAC-TEEL Derivation/Review/Revision Dates: Originally Derived	08/21/96
Physical state	S
ppm to mg/m3	9.3305268320595083
SG @ 25C unless indicated	1.1950000000000001
units of original limits	mg/m3
Vapor Pressure mm Hg	3.91x10-7
Vapor Pressure T (C)	25

DOE: Protective Action Criteria (PAC) Chemicals

Result Group

Component Name	Value
units of original limits	mg/m3

Dow Chemical Safety

Result Group

Component Name	Value
Dow Chemical Safety Assessment URL	*External Link*

Result Group

Component Name	Value
Dow Chemical Safety Assessment URL	*External Link*

The Finnish National Institute for Health and Welfare Exposure Information Database

Result Group

Component Name	Value
Einecs Number	201-245-8
Link to detailed report by chemical	*External Link*
Rapporteur	United Kingdom

Intake Fraction Database

Result Group

Component Name	Value
Approximations	An open environmental system with landscape and climate parameters reflecting U.S. averages and population-based lifetime average exposure parameters (brething rates, diet, activity patterns, etc.). Mixing height 700m, simulated continuos release and multimedia dispersion lasts for 100 years, with exposure occuring during the last 70 years of the release. Do not account the variation of pollutant concentrations and population densities, and relationships between releases and food production regions or the movement of food between regions.
Exposure pathway	Inhalation, Ingestion, Dermal
Link to study	*External Link*
Location	U.S
Medium	Air
Method	CalTOX
Reference	Bennett, D.H.; Margni, M.D.; McKone, T.E.; Jolliet, O. (2002). Intake fractions for multimedia pollutants: A tool for life cycle analysis and comparative risk assessment. Risk Analysis 22, 905-918
Region Level	National
Source height	700m (mixing height)
Source of emissions	All sources
Target population	Whole population of the target area
Time	Lifetime
Type	Chemicals

Result Group

Component Name	Value
Approximations	An open environmental system with landscape and climate parameters reflecting U.S. averages and population-based lifetime average exposure parameters (brething rates, diet, activity patterns, etc.). Mixing height 700m, simulated continuos release and multimedia dispersion lasts for 100 years, with exposure occuring during the last 70 years of the release. Do not account the variation of pollutant concentrations and population densities, and relationships between releases and food production regions or the movement of food between regions.
Exposure pathway	Inhalation, Ingestion, Dermal
Link to study	*External Link*
Location	U.S
Medium	Water
Method	CalTOX
Reference	Bennett, D.H.; Margni, M.D.; McKone, T.E.; Jolliet, O. (2002). Intake fractions for multimedia pollutants: A tool for life cycle analysis and comparative risk assessment. Risk Analysis 22, 905-918
Region Level	National
Source of emissions	All sources
Target population	Whole population of the target area
Time	Lifetime
Type	Chemicals

The TEDX (The Endocrine Disruptor Exchange) List of Potential Endocrine Disruptors

Result Group

Component Name	Value
Alternative name	BPA; 2,2-bis(4-hydroxyphenyl)propane; 4,4'-isopropylidenediphenol; polycarbonate monomer
Citation	Kubo K, Arai O, Omura M, Watanabe R, Ogata R, Aou S. 2003. Low dose effects of bisphenol A on sexual differentiation of the brain and behavior in rats. Neurosci Res 45(3):345-356.
TECX number	H13286

Result Group

Component Name	Value
Alternative name	BPA; 2,2-bis(4-hydroxyphenyl)propane; 4,4'-isopropylidenediphenol; polycarbonate monomer
Citation	Timms BG, Howdeshell KL, Barton L, Bradley S, Richter CA, vom Saal FS. 2005. Estrogenic chemicals in plastic and oral contraceptives disrupt development of the fetal mouse prostate and urethra. Proceedings of the National Academy of Sciences USA 102(19):7014-7019
TECX number	H14868

Result Group

Component Name	Value
Alternative name	BPA; 2,2-bis(4-hydroxyphenyl)propane; 4,4'-isopropylidenediphenol; polycarbonate monomer
Citation	Ho SM, Tang WY, De Frausto JB, Prins GS. 2006. Developmental exposure to estradiol and bisphenol A increases susceptibility to prostate carcinogenesis and epigenetically regulates phosphodiesterase type 4 variant 4. Cancer Res 66(11):5624-5632.
TECX number	H18236

Result Group

Component Name	Value
Alternative name	BPA; 2,2-bis(4-hydroxyphenyl)propane; 4,4'-isopropylidenediphenol; polycarbonate monomer
Citation	Murray TJ, Maffini MV, Ucci AA, Sonnenschein C, Soto AM. 2007. Induction of mammary gland ductal hyperplasias and carcinoma in situ following fetal bisphenol A exposure. Reprod Toxicol 23(3):383-390.
TECX number	H19529

Result Group

Component Name	Value
Alternative name	BPA; 2,2-bis(4-hydroxyphenyl)propane; 4,4'-isopropylidenediphenol; polycarbonate monomer
Citation	Wadia PR, Vandenberg LN, Schaeberle CM, Rubin BS, Sonnenschein C, Soto AM. 2007. Perinatal bisphenol A exposure increases estrogen sensitivity of the mammary gland in diverse mouse strains. Environ Health Perspect 115(4):592-598.
TECX number	H20212

EPA IRIS (Integrated Risk Information System)

Result Group

Component Name	Value
Date of Last Significant Revision	32412
IRIS Summary	*External Link*
Literature Screening Review	Yes
Quick View Report	*External Link*

EPA IRIS (Integrated Risk Information System) Agenda for 2012

Result Group

Component Name	Value
Category	Withdrawn Assessments

EPA Title III Consolidated List of Lists - October 2006 Version

Result Group

Component Name	Value
Section 313	313

EPA Title III Consolidated List of Lists - May 2010 Version

Result Group

Component Name	Value
Section 313	313

EPA mid-Atlantic Region Chemical Parameters

Result Group

Component Name	Value
Diffusivity in air (Dia)	0.0508662
Diffusivity in water (Diw)	5.9433e-06
Dimensionless Henry's Law Constant (H')	3.745e-10
Henry's Law Constant (HLC)	9.16e-12
Molecular Weight Source	EPI
Permeability Coefficient reference	EPI
Reference for Henry's Law Constants	EPI
Source for Diffusivity in air. See source for literature references	WATER9
Source for Diffusivity in water	WATER9
Source for Soil organic carbon-water partition coefficient (Koc)	EPI
Source for Water Solubility Limit (S)	EPI

EPA mid-Atlantic Region Human Health Risk-Based Concentrations for Fish Consumption

Result Group

Component Name	Value
Noncancer screening level for ingestion (fish consumption)	6.8E+01
RfDo	5.0E-02
RfDoNote	I = IRIS

Trade Union Priority List for REACH Authorisation

Result Group

Component Name	Value
additional information on occupational disease	Substances or group of substances related with recognised occupational diseases.
Annex VI CLP number	604-030-00-0
Chemical or chemical group number	21
EC No	201-245-8
ED1	9
Occupational disease	Phenols or counterparts or halogenated derivatives thereof
PBT	9
R2	9
s	7
total	34
Uses	antioxidant, plasticizer, intermediate, flame retardant, pesticide, process regulator, paints, adhesive,softener, construction material, stabilizer, lubricant, additive, surface treatment, filler, anti-static agent, viscosity adjustor, insulating material, hydraulic fluid, corrosion inhibitor, hardener, joint-less floor, curing agent, casting material, brake grease, primer, stopping material, catalyst, paper additive

Hazardous Chemicals in Consumer Products

Result Group

Component Name	Value
Bob The Builder' Pasta	<
Feeding Bottles	14
Winnie-the_Pooh Pasta	<

A snapshot of chemicals in doctors and nurses

Result Group

Component Name	Value
Anonymous/AK	
Anonymous/OR	0.72899999999999998
Aronberg/CA	1.85
Chan/AK	5.86
Chatham-Stehens/OR	1.46
Crane/NY	1.08
Falvo/NY	7.11
Lash/ME	2.27
Lerner/CA	2.63
Lundgren/MN	1.47
McDermott/WA	0.44900000000000001
Palfrey/MA	1.07
Perry/ME	1.39
Pomerleau/MA	1.58
Range	0.449-7.11
Redlich/CT	
Rosen/MN	2.0099999999999998
Squires/CT	
Units	g/L
Womack/MI	0.51600000000000001
Yancy/WA	0.75900000000000001

ICCA HPV Other Chemicals of Interest

Result Group

Component Name	Value
Comments for Reason	SIDS = SIAR has been prepared but may still be under discussion; chemical is already being addressed. EUPL = Chemical is included on the European Priority list (1, 2, or 3 indicates which EU list.); chemical is already being addressed.
Reason	SIDS; EUPL3

ITER TERA Risk Assessments

Result Group

Component Name	Value
ITER TERA URL	*External Link*

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

Maine Department of Health List of Chemicals of High Concern (CHC)

Result Group

Component Name	Value
Health endpoint(s)	Development, Endocrine system
HPV (2006 and 3 of 4 years)	x
Source(s)	Maine (NTP CERHR; OSPAR Chemicals of Concern; EU Endocrine Disruptor); WA Appen1; WA CHCC
Use example(s) or class	Monomer in polycarbonate and epoxy resins, plastics mfg

Minnesota Department of Health fact sheets

Result Group

Component Name	Value
fact sheet URL	*External Link*

Result Group

Component Name	Value
fact sheet URL	*External Link*

Endocrine Active Chemicals and Other Contaminants of Emerging Concern in Minnesota's Groundwater, 2009-2010

Result Group

Component Name	Value
Chemical group	Hormones and other chemicals analyzed in water samples
Maximum concentration in groundwater measured in this study	4.41 g/L
Method reporting level	100 ng/L
Notes	(1) The Minnesota Department of Health is currently (2012) reevaluating this HBV.
Source or use	Plasticizer

New Zealand Inventory of Chemicals

Result Group

Component Name	Value
Approved Status	HSNO Approval: HSR003399

CDC NHANES IV Chemical list

Result Group

Component Name	Value
Chemical Group	Environmental Phenols

New Chemical	New

NIH Listing of Substances of Concern Potentially Subject to Disclosure

Result Group

Component Name	Value
Chemical Group	BISPHENOLS
disclosure requirements for the chemical	All products containing Bisphenol A except for food packaging containing Bisphenol A in forms and amounts allowed by the Food and Drug Administration.
Group disclosure requirements	Disclose all products containing any of the listed bisphenols except as noted for specific compounds in this chemical group.

Tox Town

Result Group

Component Name	Value
URL	*External Link*

NOAA Database of hazardous materials

Result Group

Component Name	Value
Cameo URL	http://cameochemicals.noaa.gov/chemical/8331

Screening of phenolic substances in the Nordic environments 2006/2007

Result Group

Component Name	Value
Summary results for biological samples - Egg, seabird	6-9
Summary results for biological samples - marine fish	<10
Summary results for biological samples - Mussels, marine/non-marine	<1-3
Summary results for biological samples - non-marine fish	<1-57
Summary results for solid samples - Landfill soil	<0.1-3
Summary results for solid samples - Sediment, marine	<0.1-74
Summary results for solid samples - Sediment, non-marine	<0.1-40
Summary results for solid samples - STP sludge	<0.4-1914
Summary results for water samples - Background, marine/fresh	<1-11
Summary results for water samples - Landfill Effluent	711-5,910
Summary results for water samples - Recipient, marine/fresh	<1-22
Summary results for water samples - Sewage Treatment Plant (STP) effluent	<1-561
Summary results for water samples - Sewage Treatment Plant (STP) influent/sewage	204-9,828
Summary results for water samples - Surface runoff	<1-5,910

OECD Sponsored Chemicals

Result Group

Component Name	Value
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	Value
Current Status	SIAR Publication Available
Selection date	97/04
SIAM	SIAM-10, SIAM-14
Sponsors	UK

OECD Sponsored Chemicals

Result Group

Component Name	Value
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	Value
Current Status	Publication available
Selection date	35521
SIAM	SIAM-10, SIAM-14
Sponsors	UK

OECD Sponsored Chemicals

Result Group

Component Name	Value
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	Value
Current Status	Publication available
Selection date	35521
SIAM	SIAM-10, SIAM-14
Sponsors	UK

OSHA Chemical Sampling Information

Result Group

Component Name	Value
Chemical URLs	*External Link*

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Groundwater

Result Group

Component Name	Value
Source for MSCs for non-Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for non-Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for non-Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap
Source for MSCs for Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap

Chemical and Physical properties from Risk Assessment Information System (RAIS)

Result Group

Component Name	Value
Absorption Factor, Dermal	1.00E-01
Beef Transfer Coeff.	5.22E-05
Density	-
Diffusivity in Air	5.09E-02
Diffusivity in Water	5.94E-06
Fish Bioacc. Factor	4.38E+01
GI Absorption Factor	1.00E+00
Log of Octanol-Water Partition Coef.	3.32E+00
Melting Point	1.53E+02
Milk Transfer Coeff.	1.65E-05
Molecular Weight	2.28E+02
Organic Carbon Partition Coef.	3.77E+04
Reference for Beef Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Boiling Point	LANGE
Reference for Diffusivity in Air	WATER9 (U.S. EPA, 2001)
Reference for Diffusivity in Water	WATER9 (U.S. EPA, 2001)
Reference for Fish Bioacc. Factor	EPI
Reference for Log of Octanol-Water Partition Coef.	EPI
Reference for Melting Point	EPI
Reference for Milk Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Molecular Weight	EPI
Reference for Organic Carbon Partition Coef.	EPI
Reference for Skin Permeability Constant	EPI
Reference for Soil-to-Dry Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Soil-to-Wet Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Unitless Henry's Law Constant	EPI
Reference for Vapor Pressure	EPI
Reference for Water Solubility	EPI
Skin Permeability Constant	1.32E-02
Soil-Water Partition Coef.	-
Unitless Henry's Law Constant	3.74E-10
Vapor Pressure	2.27E-07
Water Solubility	1.20E+02

Scorecard Health Effects Summaries

Result Group

Component Name	Value
Health Impact Type	Suspected Cardiovascular or Blood Toxicity Hazard
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Endocrine Toxicants
References. See source for complete citations http://www.scorecard.org/health-effects/	BKH, GUIL, IL-EPA, JNIHS, KEIT, RTECS, WWF

Result Group

Component Name	Value
Health Impact Type	Suspected Gastrointestinal Or Liver Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Immunotoxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	HAZMAP

Result Group

Component Name	Value
Health Impact Type	Suspected Kidney Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Neurotoxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	RTECS

Result Group

Component Name	Value
Health Impact Type	Suspected Reproductive Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	JANK, NTP-R

Result Group

Component Name	Value
Health Impact Type	Suspected Skin Or Sense Organ Toxicant
References. See source for complete citations http://www.scorecard.org/health-effects/	HAZMAP, KLAA

Total Use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Industrial use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Denmark
Use	Not stated

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland

Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark

Use	Private households with employed persons

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway

Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Research and Development

Result Group

Component Name	Value
Country	Finland
Use	Health and social work

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway

Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark

Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden

Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway

Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Mining support service activities

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Finland
Use	Air transport

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark

Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Exposure, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Air	x = One or several uses indicate a potential exposure
Consumer	x = One or several uses indicate a potential exposure
Country	Norway
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	x = One or several uses indicate a potential exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xx: One or several uses indicate a probable exposure
Country	Sweden
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	xx: One or several uses indicate a probable exposure
Waste_Water	xx: One or several uses indicate a probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xxx: One or several uses indicate a very probable exposure
Country	Denmark
Range_of_use	xxx: One or several uses indicate a very probable exposure
Surface_Water	xxx: One or several uses indicate a very probable exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway

Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Finland

Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland

Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Laboratory chemicals

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden

Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark

Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark

Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway

Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden

Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Detailed Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Catalysts

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Paper and Paper Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Pharmaceuticals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Plastic additives and auxiliaries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S

DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Metal surface coating agents

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N

Result Group

DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK

DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK

DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	N
DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK

DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives based on organic thinners

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives No thinner Industrial use

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S

DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives hardener for industrial use

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	DK
DetailedUse	Damp-proofing paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Floor paints (see also Flooring materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S

DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface-active agents (detergents surfactants)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment for paper cardboard and non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Rust inhibitors

Result Group

Component Name	Value
Country	S

DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK

DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

USGS Health-Based Screening Levels (HBSLs)

Result Group

Component Name	Value
Chemical Class	Other emerging contaminant
Noncancer HBSL	400
USGS Parameter Code(s)	62069, 67304, 67305

Detailed USGS Health-Based Screening Levels (HBSLs)

Result Group

Component Name	Value
Cancer Class	NAV
Cancer Class Date	NAV
Cancer Class Source	NAV
Chemical Class	Emerging contaminant
HBSL Basis	HBSL calculated using OW formula for Lifetime HA
HBSL Date	38707
High end of HBSL range corresponding to one in ten thousand cancer risk	400
Low end of HBSL range corresponding to one in one million cancer risk	400
New Benchmark?	Y
Toxicity Value	0.05
Toxicity Value Date	32253
Toxicity Value Source	IRIS
Toxicity Value Type	RfDo
Toxicity Value Web Reference (URL)	*External Link*

USGS Target Compounds for NREC in US Streams

Result Group

Component Name	Value
Chemical Class	Industrial and Household Wastewater Products
Chemical sub-class	Others
specific function or use	used in polymers

USGS NAWQA highest priority chemicals for Cycle 3 monitoring

Result Group

Component Name	Value
Constituent group(s)	F, I
explanation for Constituent group(s)	lipophilic organic compounds in sediment (F); wastewater-indicator and industrial compounds in water (I)
Tier for sediment	1
Tier for water	1

USGS Lipophilic Organic Compounds (LOCs) for monitoring in Sediment in Cycle 3

Result Group

Component Name	Value
Aquatic-life bin	1
Chemical Detail	Phenol
Compound monitored in NAWQA Cycle 1?	No
NTAS Tier for sediment	1
Screening pathway	P4
Subgroup	F-9
Subgroup Name	Alkylphenols, alkylphenol ethoxylates, and other phenols

USGS substances for monitoring in Cycle 3

Result Group

Component Name	Value
Constituent group(s)	F, I
Explanation for Constituent group(s)	lipophilic organic compounds in sediment (F); wastewater-indicator and industrial compounds in water (I)
Priority	1
Priority	1

Washington indicators of potential exposure

Result Group

Component Name	Value
Biomonitoring	YES
Children's Products	YES
Drinking Water	YES
General Products	YES
Indoor Air	YES

Chemicals Analyzed for Loading Studies for Puget Sound

Result Group

Component Name	Value
Ocean exchange	X
Publically-owned treatment works	X
Surface Runoff	A

Regulatory Risk Management

ASEAN Cosmetic Directive Annex II list of prohibited substances

Result Group

Component Name	Value
Status	substances which must not form part of the composition of cosmetic products

ASEAN Cosmetic Directive Annex II list of prohibited substances

Result Group

Component Name	Value
Ref. No.	1176

detailed data table for the ATSDR 2011 Priority List of Hazardous Substance

Result Group

Component Name	Value
AqTx	100
BHP	Evidence for biodegradation, hydrolysis, or photolysis in the environment. RQ is raised by 1 level
Carc	no evidence of carcinogencity was located
ChrnTx	1000
Ig/Re	50000
MamTx	5000
Year	2001

ATSDR: Substance Priority List 2011 Detailed Report

Result Group

Component Name	Value
Rank 2007	617
Rank Difference	-2

ATSDR: Substance Priority List 2011 Detailed Report

Result Group

Component Name	Value
Rank 2013	615
Rank Difference	2

Belgium positive list of starting materials permitted to produce plastics that may come in contact with drinking water

Result Group

Component Name	Value
Maximum tolerable concentration (MTC) or other specification	30
Note	NULL

Chemicals Known to Cause Cancer or Reproductive Toxicity

Result Group

Component Name	Value
Basis for Identification	CERHR
Type of Toxicity	developmental

California Department of Public Health (DPH) information for submission of analytical results for required testing of drinking water (DW)

Result Group

Component Name	Value
Reporting Units	g/L
Storet No. or Assigned ID No.	81651

California Drinking Water Standards (MCLs) 2015 ver.

Result Group

Component Name	Value
Reporting Units	g/L
Storet No. or Assigned ID No.	81651

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	3070

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	03070

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	03070

Chemicals Biomonitored in California

Result Group

Component Name	Value
URL for Chemical Biomonitored in California	*External Link*

Project Results for Firefighter Occupational Exposures (FOX) Project

Result Group

Component Name	Value
25th	0.71799999999999997
50th	1.53
75th	3.16
95% Confidence Interval lower	1.25
95% Confidence Interval upper	1.99
95th	11.9
Chemical Group	Environmental Phenols
Detection Frequency	0.94099999999999995
Geometric mean	1.58
Indicates Exposure to	Bisphenol A
Limit of Detection (LOD), wet-weight	0.2
Measured in	Urine
Sample Collection Date	2010 to 2011
Units	g/L

Results for Maternal and Infant Environmental Exposure Project (MIEEP)

Result Group

Component Name	Value
25th	0.49
50th	1.27
75th	3.13
90th	4.8499999999999996
95% Confidence Interval lower	0.98399999999999999
95% Confidence Interval upper	1.58
Chemical Group	Environmental Phenols
Geometric mean (95% Confidence Interval)	1.25
Indicates Exposure to	Bisphenol A
Limit of Detection (LOD), wet-weight	0.2
Measured in	Urine
Sample Collection Date	2010 to 2011
Units	g/L

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity (Prop 65) (2014)

Result Group

Component Name	Value
Comments	Delisted April 19, 2013

Ontario Water Quality Objectives

Result Group

Component Name	Value
PWQOs and Interim PWQOs	5g/L (Interim PWQO)

CARB Air Toxics Hot Spots

Result Group

Component Name	Value
Add Date	06/91
Applicable Degree of Accuracy (lb/yr)	100
Class	Appendix A-1 Substances For Which Emissions Must Be Quantified
POM	POM
Source List 1 California Air Resources Board	1
Source List 2 Environmental Protection Agency	2

China Chemical Inventory

Result Group

Component Name	Value
Chinese alias	2,2-(4-) ;... ;4,4'-(1-")...
Chinese name	... A
English Alias	2,2-bis(4-Hydroxyphenyl)propane;bis-Phenol propane;Phenol, 4,4'-(1-methylethylidene)bis-
Formula	C15H16O2

DanishEPA Lists of Effects for 2009

Result Group

Component Name	Value
HF	*

Delaware Requirements for Reporting of a Discharge of a Pollutant or Air Contaminant

Result Group

Component Name	Value
agreement with federal regulations	(DE) the substance DRQ does not agree with the federal reportable quantity under CERCLA or EPCRA requirements to report to the (NRC)
Delaware Reportable Quantity (DRQ)	100

Delaware DNREC-SIRS reporting levels (RLs) for hazardous or potentially hazardous conditions that exist during remediation (2014)

Result Group

Component Name	Value
carcinogrnic or noncarcinogen	n
Key for soil reporting Level	RSL: EPA Regional Screening Level from May 2014 (with TR = 1E-06 and THQ = 1)
Soil reporting level	3100

Delaware DNREC SIRS Cleanup Standard, screening level tables

Result Group

Component Name	Value
carcinogrnic or noncarcinogen	n
Ecological Sediment ,Marine Screening Level	---
Ecological Sediment Fresh screening level	---
Ecological Surface Water ,Fresh, screening level	---
Ecological Surface Water, Marine, screening level	---
Ecological, Surface Soil, screening level	---
Ground water screening level	77
Key for Ground water screening level	RSL = EPA Regional Screening Level from May 2014 (with TR= 1E-06 and THQ= 0.1)
Key for soil screening Level	RSL = EPA Regional Screening Level from May 2014 (with TR= 1E-06 and THQ= 0.1)
Soil screening level	310
Sub-Slab Gas and Soil Gas screening level	---

DSSTox IRIS Study Summaries

Result Group

Component Name	Value
DrinkingWater_OralSlope_Assessed	0.0
DrinkingWater_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Endpoint	cancer; acute; short-term; sub-chronic; chronic; developmental
Inhalation_PrecursorEffect_TumorType	Not assessed under the IRIS program.
Inhalation_RfC_Assessed	0.0
Inhalation_RfC_CriticalEffects	Not assessed under the IRIS program.
Inhalation_UnitRisk_Assessed	0.0
Oral_RfD_Assessed	1.0
Oral_RfD_Confidence	High
Oral_RfD_CriticalEffects	decreased mean body weight
Oral_RfD_mg_per_kg_day	0.05 mg/kg-bw/day
Oral_RfD_mmol_per_kg_day	2.19E-4 mmol/kg-bw/day
Oral_RfD_Notes	LOAEL (Lowest observed adverse effect level): 50 mg/kg-day
Species	rodent; human; dog; rabbit
StudyType	Human Health Exposure Toxicity Review for Risk Assessment
TotalAssessments	1.0
WtOfEvidence_1986GuidelineCategories	Not assessed under the IRIS program.
WtOfEvidence_Cancer_Assessed	0.0

DSSTox IRIS URLs

Result Group

Component Name	Value
IRIS URL	*External Link*

DSSTox HPV Challenge Study Summaries

Result Group

Component Name	Value
HPV_Chemical_Sponsorship_Status	Not sponsored
HPV_Indicator	2 (OECD HPV Information Screening Data Set - SIDS)
HPV_TestPlan_Chemical	No

DSSTox HPV Challenge URLs

Result Group

Component Name	Value
HPV Challenge URL	*External Link*

ECHA Registry of Intentions, Registry of current Harmonized Classification and Labeling Intentions

Result Group

Component Name	Value
Details of chemicals	*External Link*

ECHA Annex XV transitional reports

Result Group

Component Name	Value
Document URL	*External Link*
EC/List number	201-245-8
Member State	UK

ECHA Community Rolling Action Plan List of Substances

Result Group

Component Name	Value
Concern	Suspected Endocrine Disruptor; Exposure/Wide dispersive use, consumer use, high aggregated tonnage
EC/List number	201-245-8
Member state	Germany
Status	Ongoing

Registry of Submitted Harmonized Classification and Labelling Intentions

Result Group

Component Name	Value
EC Number	201-245-8
Submission date	27/09/2012

Registry of Submitted Restrictions Proposal Intentions

Result Group

Component Name	Value
Date	17/01/2014
EC Number	201-245-8
Scope	Thermal paper

Registered substances

Result Group

Component Name	Value
EC Number	201-245-8
ID	DISS-9dbe071c-c12d-0fe1-e044-00144f67d249
Link	http://apps.echa.europa.eu/registered/data/dossiers/DISS-9dbe071c-c12d-0fe1-e044-00144f67d249/DISS-9dbe071c-c12d-0fe1-e044-00144f67d249_DISS-9dbe071c-c12d-0fe1-e044-00144f67d249.html
Registration type	Full
Submission type	Joint Submission
Tonnage	1,000,000+ tonnes per annum

Annex XV transitional reports

Result Group

Component Name	Value
Document type	Cover page [PDF]
EC Number	201-245-8
Responsible country	UK
URL	*External Link*

Result Group

Component Name	Value
Document type	Annex XV transitional report [PDF] [RTF]
EC Number	201-245-8
Responsible country	UK
URL	*External Link*

Commumity Rolling Action Plan (CoRAP) list of substances

Result Group

Component Name	Value
Concern	Suspected Endocrine Disruptor; Exposure/Wide dispersive use, consumer use, high aggregated tonnage
EC Number	201-245-8
Member state	Germany
Status	Decision taken
Year	2012

Community Rolling Action Plan 2012-2014

Result Group

Component Name	Value
Contact data	Ann BambauerFederal Institute for Occupational Safety and Health Division 5 "Federal Office for Chemicals, Authorisation of Biocides" Friedrich-Henkel-Weg 1-2544149 DortmundE-mail: chemg(at)baua.bund.de

EC Number	201-245-8
Initial grounds for concern	Suspected Endocrine Disruptor; Exposure/Wide dispersive use, consumeruse, high aggregated tonnage
Member state	Germany
Year	2012

Annex XV transitional reports

Result Group

Component Name	Value
Documents	Cover page
EC Number	201-245-8
Link	*External Link*
Member State	UK

Result Group

Component Name	Value
Documents	Annex XV transitional report
EC Number	201-245-8
Link	*External Link*
Member State	UK

Environment Canada National Pollutant Release Inventory Substances for 2007

Result Group

Component Name	Value
Substance group and reporting requirements	Part 1A Substance
Substance group and reporting requirements	Part 1A - Core Substances: Facilities need to report these substances if, in 2007, they were manufactured, processed or otherwise used at the facility in a quantity of 10 tonnes or more and employees (including contractors) worked 20,000 hours or more.

Environment Canada National Pollutant Release Inventory Substances for 2008

Result Group

Component Name	Value
Substance group and reporting requirements	Part 1A Substance
Substance group and reporting requirements	Facilities need to report these substances if, in 2008, they were manufactured, processed or otherwise used at the facility in a quantity of 10 tonnes or more and employees (including contractors) worked 20,000 hours or more

Environment Canada National Pollutant Release Inventory Substances for 2009

Result Group

Component Name	Value
Substance group and reporting requirements	Part 1A Substances
Substance group and reporting requirements	Part 1A - Core Substances: Facilities need to report these substances if, in 2009, they were manufactured, processed or otherwise used (MPO) at your facility at a concentration = 1% by weight (except for by-products and mine tailings) and in a quantity of 10 tonnes or more, and employees (including contractors) worked 20,000 hours or more at the facility.

Canada Domestic Substance List (2007)

Result Group

Component Name	Value
Bioaccumulative	No
Human Health Priorities	High
Inherently Toxic to Aquatic Organisms	Yes
Meets CEPA Categorization Criteria	Yes
Meets Environmental Criteria for Categorization	No
Meets Human Health Criteria	Yes
Persistent	No
Substance category	Organics

Environment Canada National Pollutant Release Inventory 2010 Summary

Result Group

Component Name	Value
Off-site Disposal	20
On-site Disposal	0
On-Site Releases to Air	0.27810000000000001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	23
Substance group	Part 1A
Substance group explanation	Substances listed at the original NPRI threshold
Total On-Site Releases	0.27850000000000003
units	tonnes

Environment Canada National Pollutant Release Inventory 2009 Summary

Result Group

Component Name	Value
Off-site Disposal	23
On-site Disposal	-
On-Site Releases to Air	-
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	0.037

Substance group	Part 1A
Substance group explanation	Substances listed at the original NPRI threshold
Total On-Site Releases	0
units	tonnes

Environment Canada National Pollutant Release Inventory Substances for 2012-2013

Result Group

Component Name	Value
Concentration threshold	0.01
Gazette Notice Number	26
Mass Threshold	10 tonnes MPO
Threshold Category	1A
Threshold Category Description	Part 1A = A report is required for one or more substances if they were manufactured, processed or otherwise used (MPO) at a facility at a concentration 1% by weight (except for by-products and mine tailings) and in a quantity of 10 tonnes or more, and employees worked 20,000 hours or more at a facility.
units for Concentration threshold	tonnes

Environment Canada National Pollutant Release Inventory Substances for 2013-2014

Result Group

Component Name	Value
Concentration threshold	0.01
Gazette Notice Number	220
Mass Threshold	100 kg MPO
Threshold Category	1B
Threshold Category Description	Part 1B A report is required for substances if they were manufactured, processed or otherwise used at a facility in quantities equal to or exceeding quantity and concentration thresholds, and employees worked 20,000 hours or more at a facility. The concentration threshold is not applicable for by-products or tailings/waste rock.
units for Concentration threshold	kilograms

Environment Canada National Pollutant Release Inventory 2013 Summary

Result Group

Component Name	Value
Notes	* CEPA toxic substance
Off-site Disposal	3.5
On-site Disposal	-
On-Site Releases to Air	0.001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	25
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.001
units	(tonnes)

Environment Canada National Pollutant Release Inventory 2012 Summary

Result Group

Component Name	Value
Off-site Disposal	3.5
On-Site Releases to Air	0.01
Recycling	17
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.01
units	tonnes

Environment Canada National Pollutant Release Inventory 2011 Summary

Result Group

Component Name	Value
Off-site Disposal	34
On-site Disposal	0.097
On-Site Releases to Air	0.31540000000000001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	21
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.31709999999999999
units	(tonnes

EPA IUR (Inventory Update Rule) Production Volume (1986-2002)

Result Group

Component Name	Value
1986 Range	>500M - 1B
1990 Range	> 1B
1994 Range	> 1B
1998 Range	> 1B
2002 Range	> 1B

EPA TSCA Sunset Status

Result Group

Component Name	Value
FR Citation, Section 4 Final Action	51 FR 33047, 9/18/86
Section 12(b) Sunset Date/Status	April 6, 1993
Section 4 Final Action(s)	799.94
Section 4 Sunset Date/Status	April 6, 1993

EPA TSCA Master Testing List for 1996

Result Group

Component Name	Value
Category	OECD/SIDS Chemicals
Source	OECD: Organization for Economic Cooperation and Development. /SIDS/CH
Status	Chemical Testing Program Underway -VTA
Testing Needs: Environmental	Screening Data
Testing Needs: environmental fate/exposure	Screening Data
Testing Needs; Health Effects	Screening Data
Year Added	1992

EPA Risk-Screening Environmental Indicators (RSEI)

Result Group

Component Name	Value
Inhal Tox Score	20
Inhal Tox Score Source	Non-cancer*
Oral Slope Factor	0
Oral Tox Score	20
Oral Tox Score Source	Non-cancer
RfD Confidence Level	H
RfD Listing Date	7/1/1993
RfD Source	IRIS
Source	IRIS 4/1997

Chemical Substances in the TSCA Chemical Substance Inventory

Result Group

Component Name	Value
Chemical Substance Definition	856

EPA Title III Consolidated List of Lists - July 2011 Version

Result Group

Component Name	Value
Section 313	313

EPA Title III Consolidated List of Lists - October 2012 Version

Result Group

Component Name	Value
Section 313	313

EPA eDoc from CDAT; health and safety information reported by industry under TSCA Sections 4,5, 8(d), and 8(e).

Result Group

Component Name	Value
Case Number	86930000306
Declassified	N
Submission Type	8D
Submitter	NA-8D-Nov-2011

EPA eDoc from CDAT; health and safety information reported by industry under TSCA Sections 4,5, 8(d), and 8(e).

Result Group

Component Name	Value
URL for submitted health and safety information submitted under TSCA requirements	*External Link*

EPA 2012 Chemical Data Reporting (CDR)

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	13134
IMPORTED_LB	16117690
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	910 Sylvan Ave
PARENT_CITY	Englewood Cliffs
PARENT_COMPANY_NAME	LG INTERNATIONAL AMERICA INC
PARENT_STATE	NJ
PARENT_ZIP	07632
PAST_PROD_VOLUME	20304574.3
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	13105

SITE_ADDRESS	910 Sylvan Avenue
SITE_CITY	Englewood Cliffs
SITE_COUNTY	Bergen
SITE_NAME	LG Chemical America
SITE_STATE	NJ
SITE_ZIP	07632
SUBMITTER_FIRST_NAME	Peter
SUBMITTER_LAST_NAME	Park
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	**Value**
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	16491
IMPORTED_LB	485017
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	335 Madison Avenue
PARENT_CITY	New York
PARENT_COMPANY_NAME	ITOCHU INTERNATIONAL INC
PARENT_COUNTY	New York
PARENT_STATE	NY
PARENT_SUPPLEMENTAL_ADDRESS	23rd Fl
PARENT_ZIP	10017
PAST_PROD_VOLUME	88185
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	16489
SITE_ADDRESS	360 HAMILTON AVENUE, 6TH FLOOR
SITE_CITY	WHITE PLAINS, NEW YORK
SITE_COUNTY	Westchester
SITE_NAME	ITOCHU CHEMICALS AMERICA INC. (HEAD OFFICE)
SITE_STATE	NY
SITE_ZIP	10601-1811
SUBMITTER_FIRST_NAME	Kisae
SUBMITTER_LAST_NAME	Kakefu
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	**Value**
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	17890
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	87857
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	30% - < 60%
NUMBER_ID_CODE	CASRN
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	88800
IMPORTED_LB	370373
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	600 Stewart Street
PARENT_CITY	Seattle
PARENT_COMPANY_NAME	TRINTERNATIONAL INC
PARENT_COUNTY	King
PARENT_STATE	WA
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1801
PARENT_ZIP	98101
PAST_PROD_VOLUME	28660
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	88772
SITE_ADDRESS	600 Stewart Street Suite 1801
SITE_CITY	Seattle
SITE_COUNTY	King
SITE_NAME	TRInternational INc
SITE_STATE	WA
SITE_ZIP	98101
SUBMITTER_FIRST_NAME	Sandra
SUBMITTER_LAST_NAME	Fuller
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	104625
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	2000 Town Center Suite 1450
PARENT_CITY	Southfield

PARENT_COMPANY_NAME	IDEMITSU CHEMICALS USA CORP
PARENT_COUNTY	Oakland
PARENT_STATE	MI
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1450
PARENT_ZIP	48075
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	104579
SITE_ADDRESS	2000 TOWN CENTER
SITE_CITY	SOUTHFIELD
SITE_COUNTY	Oakland
SITE_NAME	IDEMITSU CHEMICALS CORP.
SITE_STATE	MI
SITE_ZIP	48075-1135
SUBMITTER_FIRST_NAME	Shintaro
SUBMITTER_LAST_NAME	Suzuki
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	276713
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	CBI
PARENT_ADDRESS	1007 Market Street
PARENT_CITY	Wilmington
PARENT_COMPANY_NAME	E I DU PONT DE NEMOURS & CO
PARENT_COUNTY	New Castle
PARENT_STATE	DE
PARENT_ZIP	19898
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	274261
SITE_ADDRESS	1007 MARKET ST.
SITE_CITY	WILMINGTON
SITE_COUNTY	New Castle
SITE_NAME	E.I DUPONT DE NEMOURS AND COMPANY
SITE_STATE	DE
SITE_ZIP	19898
SUBMITTER_FIRST_NAME	James
SUBMITTER_LAST_NAME	Romine
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	B
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	384629
DOM_MFG_LB	CBI
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	384445
SITE_ADDRESS	1 LEXAN LN
SITE_CITY	MOUNT VERNON
SITE_COUNTY	Posey
SITE_NAME	SABIC INNOVATIVE PLASTICS MT. VERNON, LLC

SITE_STATE	IN
SITE_ZIP	476209364
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	389305
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	389290
SITE_ADDRESS	ONE PLASTICS DR
SITE_CITY	BURKVILLE
SITE_COUNTY	Lowndes
SITE_NAME	SABIC US INNOVATIVE PLASTICS LLC
SITE_STATE	AL
SITE_ZIP	36752-4001
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	000080-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	396536
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder, Liquid
PRIMARY_FORM_ID	395776
SITE_ADDRESS	2310 N Brasoport Blvd
SITE_CITY	Freeport
SITE_COUNTY	Brazoria
SITE_NAME	The Dow Chemical Company - Freeport
SITE_STATE	TX
SITE_ZIP	77541
SUBMITTER_FIRST_NAME	Imogene
SUBMITTER_LAST_NAME	Treble
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	460831

IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	OtherSolid
PRIMARY_FORM_ID	460109
SITE_ADDRESS	2020 Dow Center
SITE_CITY	Midland
SITE_COUNTY	Midland
SITE_NAME	The Dow Chemical Company
SITE_STATE	MI
SITE_ZIP	48674
SUBMITTER_FIRST_NAME	Alicia
SUBMITTER_LAST_NAME	Fitzpatrick
SUBMITTER_TITLE	Mrs.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	**Value**
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	568588
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	CBI
PARENT_ADDRESS	CBI
PARENT_CITY	CBI
PARENT_COMPANY_NAME	CBI
PARENT_COUNTY	CBI
PARENT_STATE	CBI
PARENT_SUPPLEMENTAL_ADDRESS	CBI
PARENT_ZIP	CBI
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	567553
SITE_ADDRESS	CBI
SITE_CITY	CBI
SITE_COUNTY	CBI
SITE_NAME	CBI
SITE_STATE	CBI
SITE_ZIP	CBI
SUBMITTER_FIRST_NAME	CBI
SUBMITTER_LAST_NAME	CBI
SUBMITTER_MIDDLE_INITIAL	CBI
SUBMITTER_SUFFIX	CBI
SUBMITTER_TITLE	CBI
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	**Value**
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	658443
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	CBI
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI

PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	720503
DOM_MFG_LB	187836151
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	748822
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	460 PARK AVENUE
PARENT_CITY	NEW YORK
PARENT_COMPANY_NAME	ICC Industries Inc.
PARENT_COUNTY	NEW YORK
PARENT_STATE	NY
PARENT_ZIP	10022-1906
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	748501
SITE_ADDRESS	460 PARK AVENUE
SITE_CITY	NEW YORK
SITE_COUNTY	NEW YORK
SITE_NAME	ICC CHEMICAL CORPORATION
SITE_STATE	NY
SITE_ZIP	10022-1906
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Scott
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

EPA Office of Water Preliminary Contaminant Candidate List (PCCL)

Result Group

Component Name	Value
Health Effect Data Element	Lowest Observed Adverse Effect Level (LOAEL)
Health Effect Data Element Value	2.5
Occurrence Data Element Used For Screening	FW/AW (Finished Water/Ambient Water)-Max Value
Occurrence Data Element Value	12
Occurrence Data Element Value units	ug/L
Toxicity Screening Category	Toxicity Category 3
units	mg/kg-day

EPA Office of Water Final Contaminant Candidate List Chemicals

Result Group

Component Name	Value
Final PCCL 3	Yes
Public Comment	Yes
Was compound Nominated?	Yes

EPA Office of Water table of causes for impairment for use in ADB

Result Group

Component Name	Value
Cause	4,4'-Isopropylidenediphenol. CAS Registry Number: 80-05-7. Code related to a toxic chemical in the Toxics Release Inventory.

EPA mid-Atlantic Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDo	0.05
RfDoNote	I = IRIS

EPA Mid-Atlantic Region Human Health Screening Levels

Result Group

Component Name	Value
Industrial Soil	31000
Industrial Soil Notes	n = noncancer
Residential Soil	3100
Residential Soil Notes	n = noncancer
Tap Water	580
Tap Water Screening Level Notes. c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User's Guide)	n = noncancer

EPA Mid-Atlantic Region Protection of Groundwater (screening levels)

Result Group

Component Name	Value
Risk Based soil-to-groundwater screening levels (SSL)	44

EPA Region 9 Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites.

Result Group

Component Name	Value
Molecular Weight Source	EPI
Reference for Henry's Law Constant	EPI
Source for Diffusivity in air and water	WATER9 (U.S. EPA, 2001)
Source for Permeability Coefficient	EPI
Source for Soil organic carbon-water partition coefficient (Koc)	EPI
Source for Water Solubility Limit (S)	EPI
Source Water Partition Coefficient (log Kow)	EPI

EPA Southwest region Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDoNote	I

EPA Region 9 Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites

Result Group

Component Name	Value
Industrial Soil Notes	n = noncancer
Residential Soil	310
Residential Soil Notes	n = noncancer
Tap Water Screening Level Notes	n = noncancer

EPA TRI Release levels for year 2013

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1529891.1691916001
Total On- and Off-site Disposal or Other Releases	1646800.9691916001
Total On-site Disposal or Other Releases	116909.8

EPA TRI Release levels for year 2012

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1429821.9105068
Total On- and Off-site Disposal or Other Releases	1644105.1308068
Total On-site Disposal or Other Releases	214283.22029999999

EPA TRI Release levels for year 2011

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	3519572.5471287002
Total On- and Off-site Disposal or Other Releases	3593616.1351287002
Total On-site Disposal or Other Releases	74043.588000000003

EPA TRI Release levels for year 2010

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	3139981.0597087
Total On- and Off-site Disposal or Other Releases	3263811.7220087
Total On-site Disposal or Other Releases	123830.6623

EPA TRI Chemical List for 2009

Result Group

Component Name	Value
Deminimis % Limit	1.0

EPA TRI Chemical List for 2011

Result Group

Component Name	Value
Chemical type	Individually-Listed Toxic Chemical
Deminimis % Limit	1

ESIS ESIS URL

Result Group

Component Name	Value
ESIS URL	*External Link*

ESIS ORATS URLs

Result Group

Component Name	Value
ESIS ORATS Conclusions URL	*External Link*
ESIS ORATS Final RAR URL	*External Link*
ESIS ORATS RAR Status URL	*External Link*

ESIS Classification and Labeling (Annex I)

Result Group

Component Name	Value
ATP Inserted/ATP Updated	CLP00/ATP01
EC number	201-245-8
Hazard Class and Category Code(s)	Repr. 2; STOT SE 3; Eye Dam. 1; Skin Sens. 1
Hazard Statement Code	H361f***; H335; H318; H317
Index Number	604-030-00-0
Labelling: Hazard Statement Code	H361f; H335; H318; H317;
Pictogram, Signal Word Code(s)	GHS05; GHS08; GHS07; Dgr

ESIS Classification and Labeling (Annex VI to Directive 67/548/EEC)

Result Group

Component Name	Value
Classification	Repr. Cat. 3; R62; Xi; R37-41; R43; R52
Labeling	Xn;R: 37-41-43-62-52;S: (2-)26-36/37-39-46-61

ESIS HPV Chemicals List

Result Group

Component Name	Value
ESIS Chemicals list	HPVCs (High Production Volume Chemicals)

List of REACH Allergens

Result Group

Component Name	Value
Allergic Effect	SP = photo-contact sensitizing substance.
Remarks	MAK-list 2005

EC HSA Schedule 1 occupational exposure limit values (OELVs)

Result Group

Component Name	Value
EC Number	201-245-8
Notes for specific substances	IOELV
Occupational Exposure Limit Value (8-hour reference period)	10

EC HSA Schedule 2, Part II third list of indicative occupational exposure limit values (IOELVs)

Result Group

Component Name	Value
2010-OELV (8 Hour reference period except where STEL indicated)	No OELV
EC Number	201-245-8
Limits for Substances included in the 3rd list of IOELVs. (8-Hour reference period except where STEL indicated)	10mg/m3
Notes	IOELV

EC (European Commission) Restrictions and/or specifications for Plastics in Contact with Food

Result Group

Component Name	Value
Current legislative reference	(EU) No 321/2011
FCM Substance No.	00151
Ref. No. of substances for use in plastics	13480 - 13607

EC (European Commission) Restrictions and/or specifications for Plastics in Contact with Food

Result Group

Component Name	Value
Current legislative reference	(EU) No 321/2011
FCM Substance No.	00151
Ref. No. of substances for use in plastics	13480 - 13607

European Commission List of substances banned under the Cosmetics Directive

Result Group

Component Name	Value
Ref #	1176

List of substances banned under EC Cosmetics Regulation (2015 ver.)

Result Group

Component Name	Value
EC #	201-245-8
Ref #	1176

European Commission inventory of cosmetic ingredients (2014, historical list)

Result Group

Component Name	Value
EC No	201-245-8
List number	30
Restriction/Annex/Ref#	II/1176

European Commission inventory of cosmetic ingredients (2015 historical list)

Result Group

Component Name	Value
EC No	201-245-8
List number	30
Restriction/Annex/Ref#	II/1176

EC priority list of substances for evaluation of endocrine disruption

Result Group

Component Name	Value
Group	Group I = High exposure concern

The EU list of potential endocrine disruptors (Category 1)

Result Group

Component Name	Value
Category 1 status	evidence of endocrine-disrupting properties has been found in a least one live organism

Title 21 US CFR citations - FDA Cumulative Estimated Daily Intake/Acceptable Daily Intake Database

Result Group

Component Name	Value
Regulation numbers in Title 21 US CFR	175.105 175.300 177.2800 177.1440 177.1580 177.1585 177.2280 177.2440

FDA Title 21 US CFR citations for indirect additives used in food contact substances

Result Group

Component Name	Value
Regulation numbers in Title 21 US CFR	175.105; 175.300; 177.1440; 177.1580; 177.1585; 177.2280; 177.2440; 177.2800

Florida Soil Cleanup Target Levels

Result Group

Component Name	Value
Direct Exposure; Commercial/Industrial	79000
Direct Exposure; Residential	4000
Leachability Based on Freshwater Surface Water Criteria	1.7
Leachability Based on Groundwater Criteria	11
Leachability Based on Groundwater of Low Yield/ Poor Quality	110
Leachability Based on Marine Surface Water Criteria	1.7
Target Organs/Systems or Effects	Body Weight

Florida Groundwater Cleanup Target Levels

Result Group

Component Name	Value
Fresh Water Surface Water Criteria	55 Toxicity Criteria
Groundwater Criteria	350 Minimum Criteria; Systemic Toxicant
Groundwater of Low Yield/Poor Quality Criteria	3500
Marine Surface Water Criteria	55 Toxicity Criteria
Target Organs/Systems or Effects	Body Weight

Health Canada Priority Substance Lists (2006)

Result Group

Component Name	Value
Comment	GPE - Greatest Potential for Exposure
Comment for Maximal List Subgroup	GPE - Greatest Potential for Exposure
Maximal List Subgroup	High - GPE
Status	GPE

Health Canada Priority Substance Lists (2006) (Reproductive Toxicity)

Result Group

Component Name	Value
Reproductive Toxicity	Reproductive Toxin

Health Canada High Health Priorities for Action

Result Group

Component Name	Value
Maximal list subgroup	High - - Greatest Potential for Exposure
Simple Hazard Tool Result for Reproductive Toxicity.	Positive
Status	Greatest Potential for Exposure

Health Canada List of Prohibited Cosmetic Ingredients (2014 "Hotlist")

Result Group

Component Name	Value
Status of Ingredient	List of Ingredients that are Prohibited for Use in Cosmetic Products
Synonyms and Related Compounds	Bisphenol A

List of Chemical Agents and Occupational Limit Values (OELVs)

Result Group

Component Name	Value
8-hr TLVs	10
EINECS number	201-245-8
Notes	IOELV

Japan's Summary of Initial Risk Assessments

Result Group

Component Name	Value
URLs	*External Link*

KEMI Hazardous Chemicals in Textiles

Result Group

Component Name	Value
Carcinogenic category 1A/1B	No
Environmentally hazardous, longterm effects Aquatic Chronic 1	No
Included in the REACH Candidate List	No
Mutagenic category 1A/1B	No
Respiratory sensitisation 1/1A/1B	No
Skin sensitisation 1/1A/1B	Yes
Toxic to reproduction category 1A/1B	No

Maine Department of Health List of Chemicals of High Concern (CHC)

Result Group

Component Name	Value
Health endpoint(s)	Development, Endocrine system
HPV (2006 and 3 of 4 years)	x
Source(s)	Maine (NTP CERHR; OSPAR Chemicals of Concern; EU Endocrine Disruptor); WA Appen1; WA CHCC
Use example(s) or class	Monomer in polycarbonate and epoxy resins, plastics mfg

Massachusetts Chemical Right-to-Know for Public Employees in Massachusetts

Result Group

Component Name	Value
Footnotes	F9 TOXIC CHEMICAL RELEASE SUBSTANCES. 52 FR 21152 (6/4/87). SUBJECT TO SARA TITLE III.
List	MASSACHUSETTS SUBSTANCE LIST (MSL)

MESH Annotations

Result Group

Component Name	Value
Note	xenoestrogen; RN given refers to parent cpd; structure
Pharmacological Action	Air Pollutants, Occupational
Pharmacological Action	Estrogens, Non-Steroidal
Pharmacological Action	Free Radical Scavengers

MESH URLs

Result Group

Component Name	Value
MESH URL	*External Link*

Minnesota Health Risk Evaluation for Groundwater

Result Group

Component Name	Value
Exposure duration	Acute
Exposure Value	300
Health Endpoint(s)	Developmental; Female reproductive system
URL	*External Link*
Value Type	HBV (12)

Result Group

Component Name	Value
Exposure duration	Short-term
Exposure Value	300
Health Endpoint(s)	Developmental; Female reproductive system (E); Liver system; Male reproductive system (E); Kidney system; Thyroid
URL	*External Link*
Value Type	HBV (12)

Result Group

Component Name	Value
Exposure duration	Subchronic
Exposure Value	100
Health Endpoint(s)	Liver system; Kidney system
URL	*External Link*
Value Type	HBV (12)

Result Group

Component Name	Value
Exposure duration	Chronic
Exposure Value	100**
Health Endpoint(s)	Liver system; Kidney system
URL	*External Link*
Value Type	HBV (12)

Result Group

Component Name	Value
Exposure duration	Cancer
Health Endpoint(s)	--
URL	*External Link*
Value Type	HBV (12)

Minnesota Department of Health - Chemicals of High Concern

Result Group

Component Name	Value
Health Enpoint(s)	Development, Endocrine system
HPV (2006 and 3 of 4 years)	x
Sources	Maine (NTP CERHR; OSPAR Chemicals of Concern; EU Endocrine Disruptor); WA Appen1; WA CHCC
Uses	Monomer in polycarbonate and epoxy resins, plastics mfg

North Carolina Preliminary Soil Remediation Goals (PSRGs) for the protection of groundwater

Result Group

Component Name	Value
Preliminary Industrial Health-Based PSRG	6.2E+03
Preliminary Industrial Health-Based PSRG Basis	N - The PSRG is based on the non-carcinogenic endpoint and corresponds to a hazard quotient of 0.2.
Preliminary Residential Health - Based Soil Remediation Goal	6.2E+02
Preliminary Residential Health-Based PSRG Basis	N - The PSRG is based on the non-carcinogenic endpoint and corresponds to a hazard quotient of 0.2.

New Hampshire Groundwater Quality Standards for hazardous site remediation

Result Group

Component Name	Value
NH GW-1 Groundwater Quality Standarad (Guideline)	120
NH GW-2 Guideline Quality Standard (Guideline)	GW-2 groundwater guidelines are not currently available for these chemicals.

New Hampshire Ambient Groundwater Quality Standards

Result Group

Component Name	Value
AGQS	120

New Zealand Inventory of Chemicals

Result Group

Component Name	Value
Approved Status	HSNO Approval: HSR003399

NIH Listing of Substances of Concern Potentially Subject to Disclosure

Result Group

Component Name	Value
Chemical Group	BISPHENOLS
disclosure requirements for the chemical	All products containing Bisphenol A except for food packaging containing Bisphenol A in forms and amounts allowed by the Food and Drug Administration.
Group disclosure requirements	Disclose all products containing any of the listed bisphenols except as noted for specific compounds in this chemical group.

New Jersey DOH Right to Know Hazardous Substance List

Result Group

Component Name	Value
F2	F2
Source 18	18
Source 6	6
Source 8	8
Substance Number	2388

OSHA Chemical Sampling Information

Result Group

Component Name	Value
Chemical URLs	*External Link*

OSPAR Commission List of Substances of possible concern

Result Group

Component Name	Value
Function	Phenol

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Groundwater

Result Group

Component Name	Value
Source for MSCs for non-Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for non-Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for non-Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap
Source for MSCs for Residential nonuse aquifers.	S = Aqueous solubility cap
Source for MSCs for Residential used aquifers where TDS <= 2500	G = Ingestion
Source for MSCs for Residential used aquifers where TDS >= 2500	S = Aqueous solubility cap

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Soil: Direct Contact Values.

Result Group

Component Name	Value
Source for MSCs for Non-Residential Soil, Sub-Surface Soil, 2-15 feet	C = Cap
Source for MSCs for Non-Residential Soil, Surface soil, 0-2 feet	G = Ingestion
Source for MSCs for Residential Soil, 0 - 15 feet	G = Ingestion

Pennsylvania Medium Specific Concentrations (MSCs) for Regulated Substances in Soil: Soil-Groundwater

Result Group

Component Name	Value
100x GW MSC for non-Residential non-use aquifers	12000
100x GW MSC for non-Residential used aquifers where TDS <= 2500	510
100x GW MSC for non-Residential used aquifers where TDS >2500	12000
100x GW MSC for Residential non-use aquifers	12000
100x GW MSC for Residential used aquifers where TDS >2500	12000
100x GW MSC for Residential used aquifers where TDS <= 2500	180
generic value for non-Residential non-use aquifers	46000
generic value for non-Residential used aquifers where TDS <= 2500	2000
generic value for non-Residential used aquifers where TDS >2500	46000
generic value for Residential non-use aquifers	46000
generic value for Residential used aquifers where TDS <= 2500	700
generic value for Residential used aquifers where TDS >2500	46000
Soil buffer distance	20
Source for generic value for non-Residential non-use aquifers	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for non-Residential used aquifers where TDS <= 2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for non-Residential used aquifers where TDS >2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential non-use aquifers	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential used aquifers where TDS <= 2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law
Source for generic value for Residential used aquifers where TDS >2500	E - Number calculated by the soil to groundwater equation in 250.308 of the law

Pennsylvania DEP Toxicological Properties for Regulated Substances

Result Group

Component Name	Value
Source for RfDo	I = Integrated Risk Information System (IRIS)

Pennsylvania Hazardous Substance List

Result Group

Component Name	Value
Special Hazard or Environmental Hazard	E"ENVIRONMENTAL HAZARD

Risk Assessment Information System Toxicity Metadata

Result Group

Component Name	Value
Oral RfD Basis	LOAEL
Oral RfD Confidence Level	high
Oral RfD Critical Effect	reduced mean weight
Oral RfD Modifying Factor	1
Oral RfD Study Date	1982
Oral RfD Study Reference	NTP
Oral RfD Study Species	rat
Oral RfD Target Organ	whole body
Oral RfD Uncertainty Factor	1000

Chemical and Physical properties from Risk Assessment Information System (RAIS)

Result Group

Component Name	Value
Absorption Factor, Dermal	1.00E-01
Beef Transfer Coeff.	5.22E-05
Density	-
Diffusivity in Air	5.09E-02
Diffusivity in Water	5.94E-06
Fish Bioacc. Factor	4.38E+01
GI Absorption Factor	1.00E+00
Log of Octanol-Water Partition Coef.	3.32E+00
Melting Point	1.53E+02
Milk Transfer Coeff.	1.65E-05
Molecular Weight	2.28E+02
Organic Carbon Partition Coef.	3.77E+04
Reference for Beef Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Boiling Point	LANGE
Reference for Diffusivity in Air	WATER9 (U.S. EPA, 2001)
Reference for Diffusivity in Water	WATER9 (U.S. EPA, 2001)
Reference for Fish Bioacc. Factor	EPI
Reference for Log of Octanol-Water Partition Coef.	EPI
Reference for Melting Point	EPI
Reference for Milk Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Molecular Weight	EPI
Reference for Organic Carbon Partition Coef.	EPI
Reference for Skin Permeability Constant	EPI
Reference for Soil-to-Dry Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Soil-to-Wet Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Unitless Henry's Law Constant	EPI
Reference for Vapor Pressure	EPI
Reference for Water Solubility	EPI
Skin Permeability Constant	1.32E-02
Soil-Water Partition Coef.	-
Unitless Henry's Law Constant	3.74E-10
Vapor Pressure	2.27E-07
Water Solubility	1.20E+02

SPIN, all substances (CAS numbers) with harmonised classifications

Result Group

Component Name	Value
ATP Number	30
Classification	Repr. Cat. 3; R62 Xi; R37-41 R43 R52
Index No.	604-030-00-0

SRS -- EPA Substance Regulatory Services List

Result Group

Component Name	Value
WQX -- Water Quality Exchange	Subject to specified regulation

Result Group

Component Name	Value
NTP Studies -- National Toxicology Program Study Abstracts	Subject to specified regulation

Texas TRRP Tier 1 Groundwater PCLs

Result Group

Component Name	Value
GWGWClass 3	120
GWGWClass 3	370
GWGWIng	1.2
GWGWIng	3.7

Note	n
Note	n
Note for GWGWIng	n
Notes	n

Results of Testing under TSCA Section 4

Result Group

Component Name	Value
Dose/concentration	5.4, 8.2, 13.0, 20.0, 30.0 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	Non-TSCA Protocol/Guideline
Reference	The 96-hour LC5O Value was 9.4 mg/L with its correspondmg 95% confidence interval between 8.3-11.0 mg/L.
Species	Atlantic silverside
Study Code/type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.51, 0.86, 1.4, 1.9 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1930
Reference	The 96-hour LC50 value was calculated to be 1.1 mg/l with a correspondmg 95% confidence interval between 0.92 and 1.2 mg/L. After 96 hours, one mortality was observed in the control group. Mortality of 20% was observed at a concentration of 0.86 mg/L in the exposed population.
Species	Mysid shrimp
Study Code/type	EEATOX Mysid shrimp acute toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	1.00, 1.54, 2.37, 3.65 5.62, 8.65 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1400
Reference	The 96-hour LC50 and 95% confidence interval values were 4.7 and 3.6-5.4 mg/L respectively. At the 3.58 mg/L exposure level, 9 out of the 10 test animals experienced loss of equilibrium at the 24 hour mark. The test animals however, continued to recover throughout the remainder of the test and appeared normal at the end of the study.
Species	Fathead minnows
Study Code/type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.93, 1.55, 2.60, 4.32, 7.20, 12.0, 20.0 mg/L (nominal)
Exposure	48 hr, static
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1300
Reference	The EC50 Value and 95% confidence interval were 10.2 mg/L and 9.2-ll.4 mg/L respectively. significant toxic effect at or below analyzed test concentration of 6.97 mg/L. There was no significant toxic effect at or below analyzed test concentrations pf 6.97 mg/L.
Species	Daphnid magna
Study Code/type	EEATOX Acute invertebrate toxicity (voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.78,1.30,2.16,3.6 6.0, 10.0 mg/L (nominal)
Exposure	96 hr, static
No. per group	Not applicable
Protocol/Guideline	40 CFR 797.1050
Reference	Algal growth was inhibited at concentrations of 1.99 mg/L and higher. The EC50 Values were based on 50% inhibition of cell count and total cell Volume compared to the controls. The 96-hour EC50 Values were 2.73 and 3.10 mg/L.
Species	green algae
Study Code/type	EEATOX Algae acute toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	1000 and 2000 ppm
Exposure	Diet, 103 weeks
No. per group	50 Inale, 50 female at each concentration.
Protocol/Guideline	National Toxicology Program (NTP)
Reference	No convincmg evidence of carcinogenicity. Mean body weight of all groups of rats were lower than controls, probably due to lower food consumption. Leukemias occurred at increased incidence in both sexes, but the increase was marginally significant in males and not statistically significant in females. A statistically significant increase in interstitial-cell tumors of the testes in male rats was suggestive of but was not considered convincmg evidence of a compound-related effect because this lesion normally occurs in high incidence in aging F344 rats.
Species	F344 rats
Study Code/type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	Value
Dose/concentration	1000, 5000, 10,000 ppm
Exposure	Diet, 103 weeks
No. per group	50 male/ 1000 or 5000 ppm; 50 female/ 5000 or 10,000 ppm

Protocol/Guideline	National Toxicology Pro gram (NTP)
Reference	No convincmg evidence of carcinogenicity. In male mice, there was an increased incidience of leukemias or lymphomas, but this was not statistically significant. There was a compound-related increase in incidence of multinucleated giant hepatocytes in male mice, but there were no increase of liver tumors.
Species	B6C3F1 mice
Study Code/type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	Value
Dose/concentration	0, 10.0, 50.0, 150 mg/m3
Exposure	Inhalation 6 hr/d, 2 wk
No. per group	20/sex
Protocol/Guideline	40 CFR 798.2450 (modified)
Reference	No mortalities were observed at any concentration level. Clinical observations include a porphyrin like material around the nose of males exposed to 50 or 150 mg/m3. Perineal soilmg was observed in females exposed to 150 mg/m3. Males exposed to 150 mg/m3 had statistically significant decreases in body weight gain which returned to normal limits within one week following exposure. Histological observations included minor inflammation of the epithelial lining of the nasal cavity in males exposed to 150 mg/m3, and in females exposed to 50 or 150 mg/m3. Very slight hyperplasia of squamous epithelium in the nasal cavity were observed in males and females exposed to 50 or 150 mg/m3. All treatment related changes were reversible within the 29-day recovery period.
Species	rats
Study Code/type	HESTOX Subchronic inhalation toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0, 10, 50, 150 mg/m3
Exposure	6 hr/d; 5 d/wk; 13 weeks, inhalation, whole-body exposure
No. per group	30/sex
Protocol/Guideline	40 CFR 798.2450 (modified)
Reference	No mortalities were seen at any level. Decreased body weight gain and perineal soiling from urine and porphyrin- like material around the nose and eyes were noted at all concentrations. Except for decreased body weight of high dose males, all effects disappeared shortly after cessation of exposure. Transient epithelial hyperplasia and chronic inflammation of nasal submucosa were seen in mid- and high-dose animals.
Species	rats
Study Code/type	HESTOX Subchronic inhalation toxicity

Unpublished Health and Safety Studies

Result Group

Component Name	Value
Dose/concentration	0, 5.0 :gL
Exposure	flow-through; 24 days
No. per group	91/group
Protocol/Guidelines	40 CFR 797.1520
Reference	OTS0525518
Results	Results of this study indicate that steady-state was reached on day 4 of exposure. The mean steady-state tissue concentration was 5800 ug/kg which established a BCF of 1200X. Half-life of the 14C-residues observed during depuration occurred during the first 24 hours; 98% of the accumulated residues were eliminated within 6 days
Species	fathead minnow
Study Code/Type	Fish Bioconcentration study (amended report)

Result Group

Component Name	Value
Dose/concentration	5.4, 8.2, 13.0, 20.0, 30.0 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified mg/L.
Protocol/Guidelines	Non-TSCA Protocol/ Guideline
Reference	50 FR 46699; 11/12/85, Fiche OTS0510008
Results	The 96-hour LC50 value was 9.4 mg/L with its corresponding 95% confidence interval between 8.3-11.0 mg/L
Species	Atlantic silverside
Study Code/Type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.51, 0.86, 1.4, 1.9, 3.3 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guidelines	40 CFR 797.1930
Reference	50 FR 46699; 11/12/85, Fiche OTS0510008
Results	The 96-hour LC50 value was calculated to be 1.1 mg/l with a corresponding 95% confidence interval between 0.92 and 1.2 mg/L. After 96 hours, one mortality was observed in the control group. Mortality of 20% was observed at a concentration of 0.86 mg/L in the exposed population.
Species	Mysid shrimp
Study Code/Type	EEATOX Mysid shrimp acute toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	1.00, 1.54, 2.37, 3.65, 5.62, 8.65 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guidelines	40 CFR 797.1400
Reference	50 FR 46699; 11/12/85, Fiche OTS0510594

Results	The 96-hour LC50 and 95% confidence interval values were 4.7 and 3.6-5.4 mg/L respectively. At the 3.58 mg/L exposure level, 9 out of the 10 test animals experienced loss of equilibrium at the 24 hour mark. The test animals however, continued to recover throughout the remainder of the test and appeared normal at the end of the study.
Species	Fathead minnows
Study Code/Type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	**Value**
Dose/concentration	0.93, 1.55, 2.60, 4.32, 7.20, 12.0, 20.0 mg/L (nominal)
Exposure	48 hr, static
No. per group	Not specified
Protocol/Guidelines	40 CFR 797.1300
Reference	50 FR 46699; 11/12/85, Fiche OTS0510594
Results	The EC50 value and 95% confidence interval were 10.2 mg/L and 9.2-11.4 mg/L respectively. There was no significant toxic effect at or below analyzed test concentration of 6.97 mg
Species	Daphnid magna
Study Code/Type	EEATOX Acute invertebrate toxicity (Voluntary test)

Result Group

Component Name	**Value**
Dose/concentration	0.78, 1.30, 2.16, 3.6, 6.0, 10.0 mg/L (nominal)
Exposure	96 hr, static
No. per group	Not applicable mg/L.
Protocol/Guidelines	40 CFR 797.1050
Reference	50 FR 46699; 11/12/85, Fiche OTS0510594
Results	Algal growth was inhibited at concentrations of 1.99 mg/L and higher. The EC50 values were based on 50% inhibition of cell count and total cell volume compared to the controls. The 96-hour EC50 values were 2.73 and 3.10 mg/L.
Species	green algae
Study Code/Type	EEATOX Algae acute toxicity (Voluntary test)

Result Group

Component Name	**Value**
Dose/concentration	1000 and 2000 ppm
Exposure	Diet, 103 weeks
No. per group	50 male, 50 female at each concentration.
Protocol/Guidelines	National Toxicology Program (NTP)
Reference	NTP TR-215, March 1982 NTIS PB82-184060
Results	Algal growth was inhibited at concentrations of 1.99 mg/L and higher. The EC50 values were based on 50% inhibition of cell count and total cell volume compared to the controls. The 96-hour EC50 values were 2.73 and 3.10 mg/L.
Species	F344 rats
Study Code/Type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	**Value**
Dose/concentration	1000,5000,10,000 ppm
Exposure	Diet, 103 weeks
No. per group	50 male/ 1000 or 5000 ppm 50 female/ 5000 or 10,000 ppm
Protocol/Guidelines	National Toxicology Program (NTP)
Reference	NTP TR-215, March 1982 NTIS PB82-184060
Results	No convincing evidence of carcinogenicity. In male mice, there was an increased incidence of leukemias or lymphomas, but this was not statistically significant. There was a compound-related increase in incidence of multinucleated giant hepatocytes in male mice, but there were no increase of liver tumors.
Species	B6C3F1 mice
Study Code/Type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	**Value**
Dose/concentration	0, 10.0, 50.0, 150 mg/m3
Exposure	Inhalation 6 hr/d, 2 wk
No. per group	20/sex
Protocol/Guidelines	40 CFR 798.2450 (modified)
Reference	50 FR 46699; 11/12/85, Fiche OTS0510594
Results	No mortalities were observed at any concentration level. Clinical observations include a porphyrin like material around the nose of males exposed to 50 or 150 mg/m3 . Perineal soiling was observed in females exposed to 150 mg/m3 . Males exposed to 150 mg/m3 had statistically significant decreases in body weight gain which returned to normal limits within one week following exposure. Histological observations included minor inflammation of the epithelial lining of the nasal cavity in males exposed to 150 mg/m3, and in females exposed to 50 or 150 mg/m3 . Very slight hyperplasia of squamous epithelium in the nasal cavity were observed in males and females exposed to 50 or 150 mg/m3 . All treatment related changes were reversible within the 29-day recovery period.
Species	rats
Study Code/Type	HESTOX Subchronic inhalation toxicity (Voluntary test)

Result Group

Component Name	**Value**
Dose/concentration	0, 10, 50, 150 mg/m3
Exposure	6 hr/d; 5 d/wk; 13 weeks, inhalation, whole-body exposure
No. per group	30/sex
Protocol/Guidelines	40 CFR 798.2450 (modified)
Reference	53 FR 13319; 4/22/88, Fiche OTS0531639

Results	No mortalities were seen at any level. Decreased body weight gain and perineal soiling from urine and porphyrinlike material around the nose and eyes were noted at all concentrations. Except for decreased body weight of high-dose males, all effects disappeared shortly after cessation of exposure. Transient epithelial hyperplasia and chronic inflammation of nasal submucosa were seen in mid- and high-dose animals.
Species	rats
Study Code/Type	HESTOX Subchronic inhalation toxicity

The Toxic Substance Control Act Test Submission Database (EPA TSCATS)

Result Group

Component Name	Value
TSCATS URL	*External Link*

University of Cambridge, Table of Respiratory and Skin Sensitisers

Result Group

Component Name	Value
R Phrases (where known)	37,41,43,62
S Phrases (where known)	(2),26,36/37,39,46
Skin Sensitiser	YES

Result Group

Component Name	Value
R Phrases (where known)	37,41,43,62
S Phrases (where known)	(2),26,36/37,39,46
Skin Sensitiser	YES

Compounds included in USGS Source Water-Quality Assessment (SWQA) studies

Result Group

Component Name	Value
Chemical Class	Manufacturing additives
References	Zaugg and others, 2002; Glassmeyer and others, 2005; U.S. National Library of Medicine, 2006
Secondary uses or sources	Used in manufacture of plastic and polycarbonate resins

Washington Children's Safe Product Act (CSPA) Reporting Rule. List of chemical of high concern to children (CHCC) which must be reported in children's products.

Result Group

Component Name	Value
Applicable Washington Administrative Code (WAC) section	WAC 173-334-140

List of chemical of high concern to children (CHCC)

Result Group

Component Name	Value
summary of toxicity and exposure information for that chemical, prepared by the Washington State Department of Health URL	*External Link*

Washington State Potential High Priority Chemicals (HPC)

Result Group

Component Name	Value
Biomonitoring	YES
Children's Products	YES
Drinking Water	YES
General Products	YES
Indoor Air	YES

Production and Release

CAL OCWD trace organics in Santa Ana River and comparison to Health Risk-Based Screening Levels

Result Group

Component Name	Value
Concentration, max.	ND
Concentration,min.	ND
Freq	0/4
Health Risk-Based DWEL	1800
lab	MWD & OCWD
Max (or MRL) > DWEL?	No
MRL	1
Source of DWEL	U.S. EPA (1993c) RfD; Snyder et al. (2008) ADI
Status	Non-Detected Compounds

CARB Air Toxics Hot Spots

Result Group

Component Name	Value
Add Date	06/91
Applicable Degree of Accuracy (lb/yr)	100
Class	Appendix A-1 Substances For Which Emissions Must Be Quantified
POM	POM
Source List 1 California Air Resources Board	1
Source List 2 Environmental Protection Agency	2

Literature Survey for Substances which may be emitted from Electric and Electronic Equipment

Result Group

Component Name	Value
Electrical appliance I URL	*External Link*

Exposure of 2-year-olds to chemical substances in Consumer Products.

Result Group

Component Name	Value
SOURCE	Pacifiers

EDSPDB Production/Import Volumes

Result Group

Component Name	Value
AIRHALF	3.180000067
BCF	37.15352631
BCF_Rank	37200
BCF_Source	Measured - ISIS BCF
CUS_90Rank	2
CUS_94Rank	2
CUS_98Rank	3
CUS_Range90	1M - <1B
CUS_Range94	1M - <1B
CUS_Range98	10K - <1M
H2OHALF	900
PERSIST	1030
SEDHALF	3600
SOILHALF	900

Environment Canada National Pollutant Release Inventory 2007 Summary

Result Group

Component Name	Value
Disposal by Treatment	1.1
Off-site Disposal	8.3
On-site Disposal	no facility manufactured, processed, otherwise used or released the substance.
On-Site Releases to Air	0.126
On-Site Releases to Land	no facility manufactured, processed, otherwise used or released the substance.
On-Site Releases to Water	no facility manufactured, processed, otherwise used or released the substance.
Recycling	0.045
Substance group	1A
Substance group	Part 1A - Core Substances: Facilities need to report these substances if, in 2007, they were manufactured, processed or otherwise used at the facility in a quantity of 10 tonnes or more and employees (including contractors) worked 20,000 hours or more.
Total Disposal	9.4
Total On-Site Releases	0.127

Environment Canada National Pollutant Release Inventory Substances for 2008

Result Group

Component Name	Value
Substance group and reporting requirements	Part 1A Substance
Substance group and reporting requirements	Facilities need to report these substances if, in 2008, they were manufactured, processed or otherwise used at the facility in a quantity of 10 tonnes or more and employees (including contractors) worked 20,000 hours or more

Environment Canada National Pollutant Release Inventory Substances for 2009

Result Group

Component Name	Value
Substance group and reporting requirements	Part 1A Substances
Substance group and reporting requirements	Part 1A - Core Substances: Facilities need to report these substances if, in 2009, they were manufactured, processed or otherwise used (MPO) at your facility at a concentration = 1% by weight (except for by-products and mine tailings) and in a quantity of 10 tonnes or more, and employees (including contractors) worked 20,000 hours or more at the facility.

Environment Canada National Pollutant Release Inventory 2008 Summary

Result Group

Component Name	Value
Off-site Disposal	12
On-site Disposal	no facility manufactured, processed, otherwise used or released the substance.
On-Site Releases to Air	0.314
On-Site Releases to Land	11
On-Site Releases to Water	0.162
Recycling	0.007
Substance group	Part 1A; Core Substances
Substance group	Part 1A - Core Substances: mass threshold is 10 tonnes.
Total On-Site Releases	11

Environment Canada National Pollutant Release Inventory 2010 Summary

Result Group

Component Name	Value
Off-site Disposal	20
On-site Disposal	0
On-Site Releases to Air	0.27810000000000001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	23
Substance group	Part 1A
Substance group explanation	Substances listed at the original NPRI threshold
Total On-Site Releases	0.27850000000000003
units	tonnes

Environment Canada National Pollutant Release Inventory 2009 Summary

Result Group

Component Name	Value
Off-site Disposal	23
On-site Disposal	-
On-Site Releases to Air	-
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	0.037
Substance group	Part 1A
Substance group explanation	Substances listed at the original NPRI threshold
Total On-Site Releases	0
units	tonnes

Environment Canada National Pollutant Release Inventory Substances for 2012-2013

Result Group

Component Name	Value
Concentration threshold	0.01
Gazette Notice Number	26
Mass Threshold	10 tonnes MPO
Threshold Category	1A
Threshold Category Description	Part 1A = A report is required for one or more substances if they were manufactured, processed or otherwise used (MPO) at a facility at a concentration 1% by weight (except for by-products and mine tailings) and in a quantity of 10 tonnes or more, and employees worked 20,000 hours or more at a facility.
units for Concentration threshold	tonnes

Environment Canada National Pollutant Release Inventory Substances for 2013-2014

Result Group

Component Name	Value
Concentration threshold	0.01
Gazette Notice Number	220
Mass Threshold	100 kg MPO
Threshold Category	1B
Threshold Category Description	Part 1B A report is required for substances if they were manufactured, processed or otherwise used at a facility in quantities equal to or exceeding quantity and concentration thresholds, and employees worked 20,000 hours or more at a facility. The concentration threshold is not applicable for by-products or tailings/waste rock.
units for Concentration threshold	kilograms

Environment Canada National Pollutant Release Inventory 2013 Summary

Result Group

Component Name	Value
Notes	* CEPA toxic substance
Off-site Disposal	3.5
On-site Disposal	-
On-Site Releases to Air	0.001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	25
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.001
units	(tonnes)

Environment Canada National Pollutant Release Inventory 2012 Summary

Result Group

Component Name	Value
Off-site Disposal	3.5
On-Site Releases to Air	0.01
Recycling	17
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.01
units	tonnes

Environment Canada National Pollutant Release Inventory 2011 Summary

Result Group

Component Name	Value
Off-site Disposal	34

On-site Disposal	0.097
On-Site Releases to Air	0.31540000000000001
On-Site Releases to Land	-
On-Site Releases to Water	-
Recycling	21
Substance group	Part 1A " Substances listed at the original NPRI threshold
Total On-Site Releases	0.31709999999999999
units	(tonnes

EPA IUR (Inventory Update Rule) Production Volume (1986-2002)

Result Group

Component Name	Value
1986 Range	>500M - 1B
1990 Range	> 1B
1994 Range	> 1B
1998 Range	> 1B
2002 Range	> 1B

EPA IUR (2006)

Result Group

Component Name	Value
Aggregate production volume for the chemical	1 billion lbs and greater
Chemical Commercial use	Yes
Chemical industrial process use	Yes
Maximum concentration of the chemical	Greater than 90%
Number of chemical sites for production	100 to 999
Number of workers exposed to the chemical	1000 or greater
Physical form(s) taken by the chemical	Dry Powder, Pellets or Large Crystals, Other Solid, Liquid

EPA 2012 Chemical Data Reporting (CDR)

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	< 10
C_PCT_PROD_VOLUME	100
IMPORTED_LB	16117690
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	910 Sylvan Ave
PARENT_CITY	Englewood Cliffs
PARENT_COMPANY_NAME	LG INTERNATIONAL AMERICA INC
PARENT_STATE	NJ
PARENT_ZIP	07632
PAST_PROD_VOLUME	20304574.3
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	13105
PRODUCT_CATEGORY	Electrical and Electronic Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	13134
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	13134
SITE_ADDRESS	910 Sylvan Avenue
SITE_CITY	Englewood Cliffs
SITE_COUNTY	Bergen
SITE_NAME	LG Chemical America
SITE_STATE	NJ
SITE_ZIP	07632
SUBMITTER_FIRST_NAME	Peter
SUBMITTER_LAST_NAME	Park
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	100
IMPORTED_LB	485017
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10

PARENT_ADDRESS	335 Madison Avenue
PARENT_CITY	New York
PARENT_COMPANY_NAME	ITOCHU INTERNATIONAL INC
PARENT_COUNTY	New York
PARENT_STATE	NY
PARENT_SUPPLEMENTAL_ADDRESS	23rd Fl
PARENT_ZIP	10017
PAST_PROD_VOLUME	88185
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	16489
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	16491
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	16491
SITE_ADDRESS	360 HAMILTON AVENUE, 6TH FLOOR
SITE_CITY	WHITE PLAINS, NEW YORK
SITE_COUNTY	Westchester
SITE_NAME	ITOCHU CHEMICALS AMERICA INC. (HEAD OFFICE)
SITE_STATE	NY
SITE_ZIP	10601-1811
SUBMITTER_FIRST_NAME	Kisae
SUBMITTER_LAST_NAME	Kakefu
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	**Value**
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	17890
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	17890
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	**Value**
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage

PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	17890
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	17890
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	30% - < 60%
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	87857
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	87857
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	30% - < 60%
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
PRODUCT_CATEGORY	Paints and Coatings

P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	87857
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	87857
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	Not Known or Reasonably Ascertainable
CONS_COMM_OPTION	Not Known or Reasonably Ascertainable
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	100
IMPORTED_LB	370373
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	600 Stewart Street
PARENT_CITY	Seattle
PARENT_COMPANY_NAME	TRINTERNATIONAL INC
PARENT_COUNTY	King
PARENT_STATE	WA
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1801
PARENT_ZIP	98101
PAST_PROD_VOLUME	28660
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	88772
PRODUCT_CATEGORY	Not Known or Reasonably Ascertainable
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	88800
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	88800
SITE_ADDRESS	600 Stewart Street Suite 1801
SITE_CITY	Seattle
SITE_COUNTY	King
SITE_NAME	TRInternational INc
SITE_STATE	WA
SITE_ZIP	98101
SUBMITTER_FIRST_NAME	Sandra
SUBMITTER_LAST_NAME	Fuller
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	CBI
CONS_COMM_OPTION	CBI
C_MAX_CONCENTRATION	CBI
C_NUM_WORKERS	CBI
C_PCT_PROD_VOLUME	CBI
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUM_WORKERS	< 10
PARENT_ADDRESS	2000 Town Center Suite 1450
PARENT_CITY	Southfield
PARENT_COMPANY_NAME	IDEMITSU CHEMICALS USA CORP
PARENT_COUNTY	Oakland
PARENT_STATE	MI
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1450
PARENT_ZIP	48075
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	104579
PRODUCT_CATEGORY	CBI
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	104625
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	104625

SITE_ADDRESS	2000 TOWN CENTER
SITE_CITY	SOUTHFIELD
SITE_COUNTY	Oakland
SITE_NAME	IDEMITSU CHEMICALS CORP.
SITE_STATE	MI
SITE_ZIP	48075-1135
SUBMITTER_FIRST_NAME	Shintaro
SUBMITTER_LAST_NAME	Suzuki
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	CBI
PARENT_ADDRESS	1007 Market Street
PARENT_CITY	Wilmington
PARENT_COMPANY_NAME	E I DU PONT DE NEMOURS & CO
PARENT_COUNTY	New Castle
PARENT_STATE	DE
PARENT_ZIP	19898
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	274261
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	276713
SITE_ADDRESS	1007 MARKET ST.
SITE_CITY	WILMINGTON
SITE_COUNTY	New Castle
SITE_NAME	E.I DUPONT DE NEMOURS AND COMPANY
SITE_STATE	DE
SITE_ZIP	19898
SUBMITTER_FIRST_NAME	James
SUBMITTER_LAST_NAME	Romine
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	B
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI
IMPORTED_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	384445
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	384629
SITE_ADDRESS	1 LEXAN LN
SITE_CITY	MOUNT VERNON
SITE_COUNTY	Posey
SITE_NAME	SABIC INNOVATIVE PLASTICS MT. VERNON, LLC
SITE_STATE	IN
SITE_ZIP	476209364
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI

MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	389290
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	389305
SITE_ADDRESS	ONE PLASTICS DR
SITE_CITY	BURKVILLE
SITE_COUNTY	Lowndes
SITE_NAME	SABIC US INNOVATIVE PLASTICS LLC
SITE_STATE	AL
SITE_ZIP	36752-4001
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder, Liquid
PRIMARY_FORM_ID	395776
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	396536
SITE_ADDRESS	2310 N Brasoport Blvd
SITE_CITY	Freeport
SITE_COUNTY	Brazoria
SITE_NAME	The Dow Chemical Company - Freeport
SITE_STATE	TX
SITE_ZIP	77541
SUBMITTER_FIRST_NAME	Imogene
SUBMITTER_LAST_NAME	Treble
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUM_WORKERS	< 10
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	OtherSolid
PRIMARY_FORM_ID	460109
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	460831
SITE_ADDRESS	2020 Dow Center
SITE_CITY	Midland
SITE_COUNTY	Midland
SITE_NAME	The Dow Chemical Company
SITE_STATE	MI
SITE_ZIP	48674
SUBMITTER_FIRST_NAME	Alicia

SUBMITTER_LAST_NAME	Fitzpatrick
SUBMITTER_TITLE	Mrs.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	CBI
PARENT_ADDRESS	CBI
PARENT_CITY	CBI
PARENT_COMPANY_NAME	CBI
PARENT_COUNTY	CBI
PARENT_STATE	CBI
PARENT_SUPPLEMENTAL_ADDRESS	CBI
PARENT_ZIP	CBI
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	567553
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	568588
SITE_ADDRESS	CBI
SITE_CITY	CBI
SITE_COUNTY	CBI
SITE_NAME	CBI
SITE_STATE	CBI
SITE_SUPPLEMENTAL_ADDRESS	CBI
SITE_ZIP	CBI
SUBMITTER_FIRST_NAME	CBI
SUBMITTER_LAST_NAME	CBI
SUBMITTER_MIDDLE_INITIAL	CBI
SUBMITTER_SUFFIX	CBI
SUBMITTER_TITLE	CBI
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	2
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Ink, Toner, and Colorant Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO

CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	4
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	4
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Food Packaging
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	45

DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Toys, Playground, and Sporting Equipment
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	10
DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	45
DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto

PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Electrical and Electronic Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	460 PARK AVENUE
PARENT_CITY	NEW YORK
PARENT_COMPANY_NAME	ICC Industries Inc.
PARENT_COUNTY	NEW YORK
PARENT_STATE	NY
PARENT_ZIP	10022-1906
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	748501
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	748822
SITE_ADDRESS	460 PARK AVENUE
SITE_CITY	NEW YORK
SITE_COUNTY	NEW YORK
SITE_NAME	ICC CHEMICAL CORPORATION
SITE_STATE	NY
SITE_ZIP	10022-1906
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Scott
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

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Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	13134
IMPORTED_LB	16117690
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	910 Sylvan Ave
PARENT_CITY	Englewood Cliffs
PARENT_COMPANY_NAME	LG INTERNATIONAL AMERICA INC
PARENT_STATE	NJ
PARENT_ZIP	07632
PAST_PROD_VOLUME	20304574.3
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	13105
SITE_ADDRESS	910 Sylvan Avenue
SITE_CITY	Englewood Cliffs
SITE_COUNTY	Bergen
SITE_NAME	LG Chemical America
SITE_STATE	NJ
SITE_ZIP	07632
SUBMITTER_FIRST_NAME	Peter
SUBMITTER_LAST_NAME	Park

SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	16491
IMPORTED_LB	485017
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	335 Madison Avenue
PARENT_CITY	New York
PARENT_COMPANY_NAME	ITOCHU INTERNATIONAL INC
PARENT_COUNTY	New York
PARENT_STATE	NY
PARENT_SUPPLEMENTAL_ADDRESS	23rd Fl
PARENT_ZIP	10017
PAST_PROD_VOLUME	88185
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	16489
SITE_ADDRESS	360 HAMILTON AVENUE, 6TH FLOOR
SITE_CITY	WHITE PLAINS, NEW YORK
SITE_COUNTY	Westchester
SITE_NAME	ITOCHU CHEMICALS AMERICA INC. (HEAD OFFICE)
SITE_STATE	NY
SITE_ZIP	10601-1811
SUBMITTER_FIRST_NAME	Kisae
SUBMITTER_LAST_NAME	Kakefu
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	17890
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	87857
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	30% - < 60%

NUMBER_ID_CODE	CASRN
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	88800
IMPORTED_LB	370373
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	600 Stewart Street
PARENT_CITY	Seattle
PARENT_COMPANY_NAME	TRINTERNATIONAL INC
PARENT_COUNTY	King
PARENT_STATE	WA
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1801
PARENT_ZIP	98101
PAST_PROD_VOLUME	28660
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	88772
SITE_ADDRESS	600 Stewart Street Suite 1801
SITE_CITY	Seattle
SITE_COUNTY	King
SITE_NAME	TRInternational INc
SITE_STATE	WA
SITE_ZIP	98101
SUBMITTER_FIRST_NAME	Sandra
SUBMITTER_LAST_NAME	Fuller
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	104625
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	2000 Town Center Suite 1450
PARENT_CITY	Southfield
PARENT_COMPANY_NAME	IDEMITSU CHEMICALS USA CORP
PARENT_COUNTY	Oakland
PARENT_STATE	MI
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1450
PARENT_ZIP	48075
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	104579
SITE_ADDRESS	2000 TOWN CENTER

SITE_CITY	SOUTHFIELD
SITE_COUNTY	Oakland
SITE_NAME	IDEMITSU CHEMICALS CORP.
SITE_STATE	MI
SITE_ZIP	48075-1135
SUBMITTER_FIRST_NAME	Shintaro
SUBMITTER_LAST_NAME	Suzuki
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	276713
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	CBI
PARENT_ADDRESS	1007 Market Street
PARENT_CITY	Wilmington
PARENT_COMPANY_NAME	E I DU PONT DE NEMOURS & CO
PARENT_COUNTY	New Castle
PARENT_STATE	DE
PARENT_ZIP	19898
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	274261
SITE_ADDRESS	1007 MARKET ST.
SITE_CITY	WILMINGTON
SITE_COUNTY	New Castle
SITE_NAME	E.I DUPONT DE NEMOURS AND COMPANY
SITE_STATE	DE
SITE_ZIP	19898
SUBMITTER_FIRST_NAME	James
SUBMITTER_LAST_NAME	Romine
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	B
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	384629
DOM_MFG_LB	CBI
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	384445
SITE_ADDRESS	1 LEXAN LN
SITE_CITY	MOUNT VERNON
SITE_COUNTY	Posey
SITE_NAME	SABIC INNOVATIVE PLASTICS MT. VERNON, LLC
SITE_STATE	IN
SITE_ZIP	476209364
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	389305
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	389290
SITE_ADDRESS	ONE PLASTICS DR
SITE_CITY	BURKVILLE
SITE_COUNTY	Lowndes
SITE_NAME	SABIC US INNOVATIVE PLASTICS LLC
SITE_STATE	AL
SITE_ZIP	36752-4001
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	000080-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	396536
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder, Liquid
PRIMARY_FORM_ID	395776
SITE_ADDRESS	2310 N Brasoport Blvd
SITE_CITY	Freeport
SITE_COUNTY	Brazoria
SITE_NAME	The Dow Chemical Company - Freeport
SITE_STATE	TX
SITE_ZIP	77541
SUBMITTER_FIRST_NAME	Imogene
SUBMITTER_LAST_NAME	Treble
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	460831
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO

PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	OtherSolid
PRIMARY_FORM_ID	460109
SITE_ADDRESS	2020 Dow Center
SITE_CITY	Midland
SITE_COUNTY	Midland
SITE_NAME	The Dow Chemical Company
SITE_STATE	MI
SITE_ZIP	48674
SUBMITTER_FIRST_NAME	Alicia
SUBMITTER_LAST_NAME	Fitzpatrick
SUBMITTER_TITLE	Mrs.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	568588
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	CBI
PARENT_ADDRESS	CBI
PARENT_CITY	CBI
PARENT_COMPANY_NAME	CBI
PARENT_COUNTY	CBI
PARENT_STATE	CBI
PARENT_SUPPLEMENTAL_ADDRESS	CBI
PARENT_ZIP	CBI
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	567553
SITE_ADDRESS	CBI
SITE_CITY	CBI
SITE_COUNTY	CBI
SITE_NAME	CBI
SITE_STATE	CBI
SITE_ZIP	CBI
SUBMITTER_FIRST_NAME	CBI
SUBMITTER_LAST_NAME	CBI
SUBMITTER_MIDDLE_INITIAL	CBI
SUBMITTER_SUFFIX	CBI
SUBMITTER_TITLE	CBI
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	658443
DOM_MFG_LB	CBI
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	CBI
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727

SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	720503
DOM_MFG_LB	187836151
IMPORTED_NEVER_AT_SITE	N/A
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_ID_NUMBER	80-05-7
CHEMICAL_RECYCLED	NO
CHEMICAL_REPORT_ID	748822
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUMBER_ID_CODE	CASRN
NUM_WORKERS	< 10
PARENT_ADDRESS	460 PARK AVENUE
PARENT_CITY	NEW YORK
PARENT_COMPANY_NAME	ICC Industries Inc.
PARENT_COUNTY	NEW YORK
PARENT_STATE	NY
PARENT_ZIP	10022-1906
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	748501
SITE_ADDRESS	460 PARK AVENUE
SITE_CITY	NEW YORK
SITE_COUNTY	NEW YORK
SITE_NAME	ICC CHEMICAL CORPORATION
SITE_STATE	NY
SITE_ZIP	10022-1906
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Scott
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

EPA Southwest region Region Human Health Risk-Based Concentrations

Result Group

Component Name	Value
RfDoNote	I

EPA TRI Release levels for year 2013

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1529891.1691916001
Total On- and Off-site Disposal or Other Releases	1646800.9691916001
Total On-site Disposal or Other Releases	116909.8

EPA TRI Release levels for year 2012

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1429821.9105068
Total On- and Off-site Disposal or Other Releases	1644105.1308068
Total On-site Disposal or Other Releases	214283.22029999999

EPA TRI Release levels for year 2011

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	3519572.5471287002
Total On- and Off-site Disposal or Other Releases	3593616.1351287002
Total On-site Disposal or Other Releases	74043.588000000003

EPA TRI Release levels for year 2010

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	3139981.0597087
Total On- and Off-site Disposal or Other Releases	3263811.7220087
Total On-site Disposal or Other Releases	123830.6623

EPA TRI Release levels for year 2009

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1391253.265478
Total On- and Off-site Disposal or Other Releases	1521727.8209780001
Total On-site Disposal or Other Releases	130474.5555

EPA TRI Release levels for year 2008

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1160299.3835
Total On-site Disposal or Other Releases	119343.261
TRI Total On- and Off-site Disposal or Other Releases	1279642.6444999999

EPA TRI Release levels for year 2007

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	978392.78
Total On- and Off-site Disposal or Other Releases	1122628.45
Total On-site Disposal or Other Releases	144235.67000000001

EPA TRI Release levels for year 2006

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1260167
Total On- and Off-site Disposal or Other Releases	1456997.13
Total On-site Disposal or Other Releases	196830.13

EPA TRI Release levels for year 2005

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1215898.5
Total On- and Off-site Disposal or Other Releases	1500210.64
Total On-site Disposal or Other Releases	284312.14

EPA TRI Release levels for year 2004

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1302764.3
Total On- and Off-site Disposal or Other Releases	1529783.68
Total On-site Disposal or Other Releases	227019.38

EPA TRI Release levels for year 2003

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1630091.58
Total On- and Off-site Disposal or Other Releases	1817488.81
Total On-site Disposal or Other Releases	187397.23

EPA TRI Release levels for year 2002

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	969235.53
Total On- and Off-site Disposal or Other Releases	1211189.3500000001

Total On-site Disposal or Other Releases	241953.82

EPA TRI Release levels for year 2001

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	921553
Total On- and Off-site Disposal or Other Releases	1107577.8473199999
Total On-site Disposal or Other Releases	186024.84732

EPA TRI Release levels for year 2000

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	957221
Total On- and Off-site Disposal or Other Releases	1177595.6956199999
Total On-site Disposal or Other Releases	220374.69562000001

EPA TRI Release levels for year 1999

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	965771
Total On- and Off-site Disposal or Other Releases	1182223.7044200001
Total On-site Disposal or Other Releases	216452.70441999999

EPA TRI Release levels for year 1998

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	1054716
Total On- and Off-site Disposal or Other Releases	1376466.8405800001
Total On-site Disposal or Other Releases	321750.84058000002

EPA TRI Release levels for year 1997

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	881692
Total On- and Off-site Disposal or Other Releases	1068484.0864200001
Total On-site Disposal or Other Releases	186792.08642000001

EPA TRI Release levels for year 1996

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	324986
Total On- and Off-site Disposal or Other Releases	789963
Total On-site Disposal or Other Releases	464977

EPA TRI Release levels for year 1995

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	425671
Total On- and Off-site Disposal or Other Releases	755836
Total On-site Disposal or Other Releases	330165

EPA TRI Release levels for year 1994

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	398712
Total On- and Off-site Disposal or Other Releases	1042556
Total On-site Disposal or Other Releases	643844

EPA TRI Release levels for year 1992

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	377092
Total On- and Off-site Disposal or Other Releases	898842
Total On-site Disposal or Other Releases	521750

EPA TRI Release levels for year 1991

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	258129
Total On- and Off-site Disposal or Other Releases	1111746
Total On-site Disposal or Other Releases	853617

EPA TRI Release levels for year 1990

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	381314
Total On- and Off-site Disposal or Other Releases	1154881
Total On-site Disposal or Other Releases	773567

EPA TRI Release levels for year 1989

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	447782
Total On- and Off-site Disposal or Other Releases	1463363
Total On-site Disposal or Other Releases	1015581

EPA TRI Release levels for year 1988

Result Group

Component Name	Value
Total Off-site Disposal or Other Releases	444560
Total On- and Off-site Disposal or Other Releases	1223996
Total On-site Disposal or Other Releases	779436

EPA TRI on-site Release levels for the year 2001 by media

Result Group

Component Name	Value
On-site and Off-site Surface Water Discharges	5472
Total On-site and Off-site Air Emissions	151990.84732
Total On-Site Releases to Land	28385
Total On-Site Underground Injection	177

EPA TRI on-site Release levels for the year 2000 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6727
Total On-site Air Emissions	172729.69562000001
Total On-Site Releases to Land	40701
Total On-Site Underground Injection	217

EPA TRI on-site Release levels for the year 1999 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4798
Total On-site Air Emissions	171560.70441999999
Total On-Site Releases to Land	40022
Total On-Site Underground Injection	72

EPA TRI on-site Release levels for the year 1998 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	7681
Total On-site Air Emissions	190549.84057999999
Total On-Site Releases to Land	123520
Total On-Site Underground Injection	a zero in a cell denotes either that the facility reported "0" or "NA" in its Form R submission

EPA TRI on-site Release levels for the year 1997 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	3798
Total On-site Air Emissions	165125.08642000001
Total On-Site Releases to Land	17869
Total On-Site Underground Injection	a zero in a cell denotes either that the facility reported "0" or "NA" in its Form R submission

EPA TRI on-site Release levels for the year 1996 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4803
Total On-site Air Emissions	183427
Total On-Site Releases to Land	251747
Total On-Site Underground Injection	25000

EPA TRI on-site Release levels for the year 1995 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	5809
Total On-site Air Emissions	155659
Total On-Site Releases to Land	86697
Total On-Site Underground Injection	82000

EPA TRI on-site Release levels for the year 1994 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	18260
Total On-site Air Emissions	238008
Total On-Site Releases to Land	288392
Total On-Site Underground Injection	99184

EPA TRI on-site Release levels for the year 1993 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	8366
Total On-site Air Emissions	200667
Total On-Site Releases to Land	437289
Total On-Site Underground Injection	43210

EPA TRI on-site Release levels for the year 1992 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	7463
Total On-site Air Emissions	185789
Total On-Site Releases to Land	287498
Total On-Site Underground Injection	41000

EPA TRI on-site Release levels for the year 1991 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	4492
Total On-site Air Emissions	430839
Total On-Site Releases to Land	375286
Total On-Site Underground Injection	43000

EPA TRI on-site Release levels for the year 1990 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6043
Total On-site Air Emissions	188247
Total On-Site Releases to Land	556277
Total On-Site Underground Injection	23000

EPA TRI on-site Release levels for the year 1989 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	6879
Total On-site Air Emissions	228809
Total On-Site Releases to Land	779893
Total On-Site Underground Injection	either that the facility reported 0 or NA in its Form R submission

EPA TRI on-site Release levels for the year 1988 by media

Result Group

Component Name	Value
On-site Surface Water Discharges	126385
Total On-site Air Emissions	226986
Total On-Site Releases to Land	426065
Total On-Site Underground Injection	either that the facility reported 0 or NA in its Form R submission

EPA TRI Chemical List for 2009

Result Group

Component Name	Value
Deminimis % Limit	1.0

EPA TRI Chemical List for 2011

Result Group

Component Name	Value
Chemical type	Individually-Listed Toxic Chemical
Deminimis % Limit	1

ESIS HPV Chemicals List

Result Group

Component Name	Value
ESIS Chemicals list	HPVCs (High Production Volume Chemicals)

ICCA HPV Other Chemicals of Interest

Result Group

Component Name	Value
Comments for Reason	SIDS = SIAR has been prepared but may still be under discussion; chemical is already being addressed. EUPL = Chemical is included on the European Priority list (1, 2, or 3 indicates which EU list.); chemical is already being addressed.
Reason	SIDS; EUPL3

KEMI substance flow in chemical products within Sweden

Result Group

Component Name	Value
URL for The substance flow in chemical products within Sweden for 1994	*External Link*
URL for The substance flow in chemical products within Sweden for 1995	*External Link*
URL for The substance flow in chemical products within Sweden for 1997	*External Link*
URL for The substance flow in chemical products within Sweden for 1999	*External Link*

URL for The substance flow in chemical products within Sweden for 2001	*External Link*
URL for The substance flow in chemical products within Sweden for 2004	*External Link*
URL for The substance flow in chemical products within Sweden for 2006	*External Link*
URL for The substance flow in chemical products within Sweden for 2008	*External Link*
URL for The substance flow in chemical products within Sweden for 2009	*External Link*
URL for The substance flow in chemical products within Sweden for 2010	*External Link*
URL for The substance flow in chemical products within Sweden for 2011	*External Link*
URL for The substance flow in chemical products within Sweden for 2012	*External Link*

Endocrine Active Chemicals and Other Contaminants of Emerging Concern in Minnesota's Groundwater, 2009-2010

Result Group

Component Name	**Value**
Chemical group	Hormones and other chemicals analyzed in water samples
Maximum concentration in groundwater measured in this study	4.41 g/L
Method reporting level	100 ng/L
Notes	(1) The Minnesota Department of Health is currently (2012) reevaluating this HBV.
Source or use	Plasticizer

Screening of phenolic substances in the Nordic environments 2006/2007

Result Group

Component Name	**Value**
Summary results for biological samples - Egg, seabird	6-9
Summary results for biological samples - marine fish	<10
Summary results for biological samples - Mussels, marine/non-marine	<1-3
Summary results for biological samples - non-marine fish	<1-57
Summary results for solid samples - Landfill soil	<0.1-3
Summary results for solid samples - Sediment, marine	<0.1-74
Summary results for solid samples - Sediment, non-marine	<0.1-40
Summary results for solid samples - STP sludge	<0.4-1914
Summary results for water samples - Background, marine/fresh	<1-11
Summary results for water samples - Landfill Effluent	711-5,910
Summary results for water samples - Recipient, marine/fresh	<1-22
Summary results for water samples - Sewage Treatment Plant (STP) effluent	<1-561
Summary results for water samples - Sewage Treatment Plant (STP) influent/sewage	204-9,828
Summary results for water samples - Surface runoff	<1-5,910

OECD Sponsored Chemicals

Result Group

Component Name	**Value**
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	**Value**
Current Status	SIAR Publication Available
Selection date	97/04
SIAM	SIAM-10, SIAM-14
Sponsors	UK

OECD Sponsored Chemicals

Result Group

Component Name	**Value**
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	**Value**
Current Status	Publication available
Selection date	35521
SIAM	SIAM-10, SIAM-14
Sponsors	UK

OECD Sponsored Chemicals

Result Group

Component Name	**Value**
OECD Sponsored URL	*External Link*

Status of OECD Sponsored Chemicals

Result Group

Component Name	**Value**
Current Status	Publication available
Selection date	35521
SIAM	SIAM-10, SIAM-14
Sponsors	UK

Total Use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Industrial use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Denmark
Use	Not stated

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland

Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway

Use	Other service activities

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark

Use	Private households with employed persons

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark

Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Research and Development

Result Group

Component Name	Value
Country	Finland
Use	Health and social work

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark

Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden

Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Mining support service activities

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Finland
Use	Air transport

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Exposure, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Air	x = One or several uses indicate a potential exposure
Consumer	x = One or several uses indicate a potential exposure
Country	Norway
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	x = One or several uses indicate a potential exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xx: One or several uses indicate a probable exposure
Country	Sweden
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	xx: One or several uses indicate a probable exposure
Waste_Water	xx: One or several uses indicate a probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xxx: One or several uses indicate a very probable exposure
Country	Denmark
Range_of_use	xxx: One or several uses indicate a very probable exposure
Surface_Water	xxx: One or several uses indicate a very probable exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden

Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland

Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Laboratory chemicals

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland

Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark

Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark

Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland

Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark

Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway

Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Detailed Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Catalysts

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Paper and Paper Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Pharmaceuticals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Plastic additives and auxiliaries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S

DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Metal surface coating agents

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK

Result Group

DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK

Result Group

DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK

DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	N
DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK

DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives based on organic thinners

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives No thinner Industrial use

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives hardener for industrial use

Result Group

Component Name	Value
Country	DK

DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	DK
DetailedUse	Damp-proofing paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Floor paints (see also Flooring materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S

Result Group

DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface-active agents (detergents surfactants)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment for paper cardboard and non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Rust inhibitors

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S

Result Group

DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK

DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

In Vitro

CheLIST combination of files from EU Reseearch lists

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	DGENV EAS
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	FP6 ReProTect
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

CheLIST combination of files from Method Validation Group

Result Group

Component Name	Value
EINECS	201-245-8
JRC CODE	JRC-000178
List	NICEATM ED
SMILES	C(C1C=CC(=CC=1)O)(C2=CC=C(C=C2)O)(C)C

DSSTox NCTR Estrogen Receptor Database

Result Group

Component Name	Value
ActivityCategory_ER_RBA	active weak
ActivityCategory_Rationale_ChemClass_ERB	Diphenolalkanes are relatively weak binders, 4-OH critical for binding, RBA inhibited by steric bulk as in 2,6-di-tertbutylphenol, bulk at bridge atom increases RBA similar to 7a substitution on E2.
ChemClass_ERB	Diphenylmethanes Diphenolalkanes
Endpoint	Estrogen Receptor Relative Binding Affinity
ER_RBA	0.0078
F1_Ring	1.0
F2_AromaticRing	1.0
F3_PhenolicRing	1.0
F4_Heteroatom	0.0
F5_Phenol3nPhenyl	1.0
F6_OtherKeyFeatures	0.0
LOGP	3.64
LOG_ER_RBA	-2.11
Mean_ER_RBA_ChemClass	0.0087
Species	rat
StudyType	Receptor Binding

DSSTox ArrayExpress DSSTox Annotation

Result Group

Component Name	Value
Chemical StudyType	Treatment
Experiment Accession	E-TOXM-31;E-TABM-12;E-MIMR-282;E-GEOD-4650;E-GEOD-5200;E-GEOD-10270
Experiment URL	*External Link*
Study Type	microarray

DSSTox GEO DSSTox Annotation

Result Group

Component Name	Value
Chemical StudyType	Treatment
Experiment Accession	GSE10270;GSE5200;GSE10802;GSE4650;GSE8858
Experiment URL	*External Link*
Study Type	microarray

Genotoxicity Data In Vitro from EPA HPVIS

Result Group

Component Name	Value
Conclusion	Negative
Conclusion (GeneTox)	This study was judged to have given a negative result since the observed increase in the first experiment was not reproducible.
Dose Remarks	30 - 50 g/mL with activation20 - 40 g/mL without activation
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS

Reliability	2
Results Remarks	With metabolic activation: 50 g/mLWithout metabolic activation: None reported In the first test with metabolic activation an increase in the percentage of metaphases with chromosome aberrations from bisphenol A treated cultures was observed only at the top dose in the presence of cytotoxicity; 14% at 50 g/mL compared to 3% in controls. In these high-dose cultures it was stated that cell confluence was reduced by approximately 70%. In the second test no significant increases were observed in with metabolic activation; only 3% of cells at the highest dose had aberrations. No significant increases in aberrations were observed without metabolic activation with bisphenol A evidently being tested up to "toxic levels." The positive controls produced clear increases in chromosome aberrations.
Species	Mammalian Cell Line
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	Chinese Hamster Ovary (CHO)
Study Reference	Ivett J.L. Brown B.M. Rodgers C. Anderson B.E. Ressnick M.A. and Zeiger E. 1989. Chromosomal aberrations and sister chromatid exchange tests in Chinese hamster ovary cells in vitro. IV. Results with 15 chemicals. Environ. Mol. Mutagen. 14:165-187. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	In a chromosome aberration study in Chinese hamster ovary (CHO) cells were exposed in two separate experiments to 30-50 g/mL bisphenol A for 2 hours with metabolic activation and 20-40 g/mL for 8 hours without metabolic activation. Cells were harvested at 11 hours with metabolic activation and 21 hours without metabolic activation.
Test Substance Purity	Bisphenol A
Type of Study	in vitro mammalian chromosome aberration test

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 333 g/plate
Genotoxic Effect	Negative
GLP	No Data
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Positive, Negative and Solvent Control Substance(s)	Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxicity conc.: With and without metabolic activation: 333 g/plate At 333 g/plate slight and complete clearance of the background lawn was observed in all strains with (rat and hamster liver S9) and without metabolic activation respectively. No increase in the number of revertants was seen in any of the tested cultures. Controls gave results that confirmed the validity of this test. The negative result was confirmed by independent experiment.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 100
Study Reference	Haworth S. Lawlor T. Mortelmans K. Speck W. and Zeiger E. 1983. Salmonella mutagenicity test results for 250 chemicals. Environ. Mutagen. 1:3-142. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	The pre-incubation method with Salmonella typhimurium strains TA98 TA100 TA1535 and TA1537 was used at bisphenol A concentrations up to 333 ?g/plate in the presence and absence of metabolic activation (Aroclor induced rat and hamster liver S9).
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay

Result Group

Component Name	**Value**
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	S. typhimurium TA 1538

Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

Result Group

Component Name	Value
Conclusion	Negative
Conclusion (GeneTox)	The test substance did not exhibit mutagenic activity in this assay.
Dose Remarks	0 to 1.0 mg/mL (concentrations in g/plate not reported)
Genotoxic Effect	Negative
GLP	Unknown
Metabolic Activation	With and Without
Method/Guideline Followed	No Data
Program Flag	HPVIS
Reliability	2
Results Remarks	Cytotoxic concentration: With and without metabolic activation: 1.0 mg/ml S. typhimurium TA 1538 and E. coli strains WP2 and WP2uvrA were exposed in a pre-incubation assay to bisphenol A at concentrations up to1.0 mg/mL in the presence and absence of metabolic activation. Cytotoxicity as evidenced by a >50% decrease in the number of spontaneous revertants was observed at 0.5 mg/ml in WP2uvra with and without metabolic activation and TA 1538 without metabolic activation. No cytotoxicity was observed in WP2 with and without metabolic activation. No increase in the number of revertants was seen in any of the tested cultures. An independent experiment using a plate incorporation protocol and the performance of the controls confirmed the validity of this test.
Species	Bacteria
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	72162-28-8
Strain	e. coli WP2 uvr A
Study Reference	Dean B.J. and Brooks T.M. 1978. Toxicity Tests with DiphenylolPropane (DPP): In vitro Mutation Studies. Shell Research ReportTLGR.0111.78. As cited in the EU Risk Assessment. Data entered into the HPVIS extracted from the robust summary document posted to the HPV Challenge Program website Mar. 30 2007.
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	No additional methodology or study description were reported.
Test Substance Purity	Bisphenol A (CAS RN 80-05-7)
Type of Study	Bacterial reverse mutation assay
Year Study Performed	1983

NOAA

Result Group

Component Name	Value
Concentration	164 days
Duration	1 - 1,280 g/L
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Fathead minnows
Fish Species	(Pimphales promelas)
GD	-
GSI	-
Method of Exposure	whole fish (water)
Reference	Sohoni et al., 2001
Sex	male
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	12 days
Duration	10 - 500 g/L
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Method of Exposure	whole fish (water)
Reference	Lindholst et al., 2000
Sex	juvenile
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	18 days
Duration	50 mg/kg
Experiment type	Effects of endocrine disrupting compounds on whole fish in the laboratory.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Method of Exposure	whole fish (intraperitoneal inj.)

Reference	Christiansen et al., 2000
Sex	juvenile
Use/Source	Monomer of polycarbonate
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	48 hours
Duration	1-10 M
Experiment type	In vitro (fish hepatocyte) effects of endocrine disrupting compounds.
Fish Species	Rainbow trout
Fish Species	(Oncorhynchus mykiss)
Reference	Sumpter and Jobling, 1995
Use/Source	Monomer of polycarbonate
Vtg production	0.2 - 1.7 ug/ml (approx.)
Vtg, vitellogenin	+

Result Group

Component Name	Value
Concentration	48 hours
Duration	1-10 M
Experiment type	In vitro (fish hepatocyte) effects of endocrine disrupting compounds.
Fish Species	Atlantic salmon
Fish Species	(Salmo salar)
Reference	Celius et al. , 1999
Use/Source	Monomer of polycarbonate
Vtg production	Absorbence units; >controls
Vtg, vitellogenin	+

ICCVAM Reference Substances for Validation of In Vitro ER Binding Assays

Result Group

Component Name	Value
AR Binding Activity	no relevant data
AR TA Agonist Activity	no value obtained
AR TA Antagonist Activity	substance was positive in one assay but was also negative in one or more assays
ER Binding Activity	substance was moderately active
ER TA Agonist Activity	weakly active
ER TA Antagonist Activity	no value obtained
Log Kow	3.32
Solubility in DMSO	no data
Solubility in Water	120 mg/L @ 25? C

ToxCast ACEA_IC50

Result Group

Component Name	Value
ToxCast ACEA_IC50:ACEA_IC50	61.500000031803 uM

ToxCast Attagene Factorial cis Ahr

Result Group

Component Name	Value
ToxCast Attagene Factorial cis Ahr:ATG_Ahr_CIS	32.0 uM

ToxCast Attagene Factorial cis CMV

Result Group

Component Name	Value
ToxCast Attagene Factorial cis CMV:ATG_CMV_CIS	50.0 uM

ToxCast Attagene Factorial cis CRE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis CRE:ATG_CRE_CIS	30.0 uM

ToxCast Attagene Factorial trans Era

Result Group

Component Name	Value
ToxCast Attagene Factorial trans Era:ATG_ERa_TRANS	1.1 uM

ToxCast Attagene Factorial cis ERE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis ERE:ATG_ERE_CIS	0.64 uM

ToxCast Attagene Factorial cis MRE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis MRE:ATG_MRE_CIS	32.0 uM

ToxCast Attagene Factorial cis NRF2/ARE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis NRF2/ARE:ATG_NRF2_ARE_CIS	27.0 uM

ToxCast Attagene Factorial cis Oct-MLP

Result Group

Component Name	Value
ToxCast Attagene Factorial cis Oct-MLP:ATG_Oct_MLP_CIS	37.0 uM

ToxCast Attagene Factorial trans PPARg

Result Group

Component Name	Value
ToxCast Attagene Factorial trans PPARg:ATG_PPARg_TRANS	27.0 uM

ToxCast Attagene Factorial cis PPRE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis PPRE:ATG_PPRE_CIS	37.0 uM

ToxCast Attagene Factorial trans PXR

Result Group

Component Name	Value
ToxCast Attagene Factorial trans PXR:ATG_PXR_TRANS	14.0 uM

ToxCast Attagene Factorial cis PXRE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis PXRE:ATG_PXRE_CIS	13.0 uM

ToxCast Attagene Factorial trans RARa

Result Group

Component Name	Value
ToxCast Attagene Factorial trans RARa:ATG_RARa_TRANS	15.0 uM

ToxCast Attagene Factorial cis VDRE

Result Group

Component Name	Value
ToxCast Attagene Factorial cis VDRE:ATG_VDRE_CIS	28.0 uM

ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_CCL2_MCP_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_CCL2_MCP_1_down:BSK_3C_MCP1_down	40.0 uM

ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_Proliferation_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_Proliferation_down:BSK_3C_Proliferation_down	40.0 uM

ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_Visual_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_IL_1b_TNF_a_IFN_g_24_Visual_down:BSK_3C_Vis_down	4.444444 uM

ToxCast BioSeek HUVEC_IL_4_Histamine_24_CCL2_MCP_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_IL_4_Histamine_24_CCL2_MCP_1_down:BSK_4H_MCP1_down	40.0 uM

ToxCast BioSeek HUVEC_IL_4_Histamine_24_CD106_VCAM_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_IL_4_Histamine_24_CD106_VCAM_1_down:BSK_4H_VCAM1_down	13.333333 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_HLA_DR_down

Result Group

Component Name	Value
ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_HLA_DR_down:BSK_BE3C_hLADR_down	40.0 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_CXCL10_IP_10_down

Result Group

Component Name	Value
ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_CXCL10_IP_10_down:BSK_BE3C_IP10_down	4.444444 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_MMP_1_up

Result Group

Component Name	Value

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_MMP_1_up:BSK_BE3C_MMP1_up	40.0 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_PAI_I_down

Result Group

Component Name	Value
ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_PAI_I_down:BSK_BE3C_PAI1_down	40.0 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_TGF_betaI_down

Result Group

Component Name	Value
ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_TGF_betaI_down:BSK_BE3C_TGFb1_down	4.444444 uM

ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_CD87_uPAR_down

Result Group

Component Name	Value
ToxCast BioSeek BrEPI_IL_1b_TNF_a_IFN_g_24_CD87_uPAR_down:BSK_BE3C_uPAR_down	13.333333 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_Collagen_III_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_Collagen_III_down:BSK_hDFCGF_CollagenIII_down	40.0 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CXCL10_IP_10_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CXCL10_IP_10_down:BSK_hDFCGF_IP10_down	40.0 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CXCL9_MIG_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CXCL9_MIG_down:BSK_hDFCGF_MIG_down	40.0 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_PAI_I_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_PAI_I_down:BSK_hDFCGF_PAI1_down	40.0 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_Proliferation_72hr_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_Proliferation_72hr_down:BSK_hDFCGF_Proliferation_down	40.0 uM

ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CD106_VCAM_1_down

Result Group

Component Name	Value
ToxCast BioSeek HDFn_IL_1b_TNF_a_IFN_g_EGF_FGF_PDGFbb_24_CD106_VCAM_1_down:BSK_hDFCGF_VCAM1_down	4.444444 uM

ToxCast BioSeek HEK_BioSeek HDFn_IL_1b_TNF_a_IFN_g_TGF_b_24_MMP_9_down

Result Group

Component Name	Value
ToxCast BioSeek HEK_BioSeek HDFn_IL_1b_TNF_a_IFN_g_TGF_b_24_MMP_9_down:BSK_KF3CT_MMP9_down	40.0 uM

ToxCast BioSeek HUVEC_PBMC_LPS_24_CCL2_MCP_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_LPS_24_CCL2_MCP_1_down:BSK_LPS_MPC1_down	4.444444 uM

ToxCast BioSeek HUVEC_PBMC_LPS_24_PGE2_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_LPS_24_PGE2_down:BSK_LPS_PGE2_down	13.333333 uM

ToxCast BioSeek HUVEC_PBMC_LPS_24_CD106_VCAM_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_LPS_24_CD106_VCAM_1_down:BSK_LPS_VCAM1_down	40.0 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD38_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD38_down:BSK_SAg_CD38_down	13.333333 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD40_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD40_down:BSK_SAg_CD40_down	4.444444 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD69_up

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD69_up:BSK_SAg_CD69_up	1.481481 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD62E_E_Selectin_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CD62E_E_Selectin_down:BSK_SAg_Eselectin_down	40.0 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CXCL8_IL_8_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CXCL8_IL_8_down:BSK_SAg_IL8_down	40.0 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CCL2_MCP_1_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_CCL2_MCP_1_down:BSK_SAg_MCP1_down	4.444444 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_PBMC_Cytotoxicity_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_PBMC_Cytotoxicity_down:BSK_SAg_PBMCCytotoxicity_down	40.0 uM

ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_Proliferation_down

Result Group

Component Name	Value
ToxCast BioSeek HUVEC_PBMC_SEB_TSST_24_Proliferation_down:BSK_SAg_Proliferation_down	40.0 uM

ToxCast BioSeek SMC_IL_1b_TNF_a_IFN_g_24_LDLR_up

Result Group

Component Name	Value
ToxCast BioSeek SMC_IL_1b_TNF_a_IFN_g_24_LDLR_up:BSK_SM3C_LDLR_up	40.0 uM

ToxCast BioSeek SMC_IL_1b_TNF_a_IFN_g_24_Proliferation_down

Result Group

Component Name	Value
ToxCast BioSeek SMC_IL_1b_TNF_a_IFN_g_24_Proliferation_down:BSK_SM3C_Proliferation_down	13.333333 uM

ToxCast Cellumen DNA Content

Result Group

Component Name	Value
ToxCast Cellumen DNA Content:CLM_CellCycleArrest_24hr	60.88 uM
ToxCast Cellumen DNA Content:CLM_CellCycleArrest_72hr	30.57 uM

ToxCast Cellumen Cell Number

Result Group

Component Name	Value
ToxCast Cellumen Cell Number:CLM_CellLoss_72hr	92.43 uM

ToxCast Cellumen_Hepat_CellLoss

Result Group

Component Name	Value
ToxCast Cellumen_Hepat_CellLoss:CLM_Hepat_CellLoss_24hr	140.2 uM
ToxCast Cellumen_Hepat_CellLoss:CLM_Hepat_CellLoss_48hr	169.9 uM

ToxCast Cellumen_Hepat_DNADamage

Result Group

Component Name	Value
ToxCast Cellumen_Hepat_DNADamage:CLM_Hepat_DNADamage_48hr	146.8 uM

ToxCast Cellumen_Hepat_Steatosis

Result Group

Component Name	Value
ToxCast Cellumen_Hepat_Steatosis:CLM_Hepat_Steatosis_24hr	125.6 uM
ToxCast Cellumen_Hepat_Steatosis:CLM_Hepat_Steatosis_48hr	132.1 uM

ToxCast Cellumen a-tubulin

Result Group

Component Name	Value
ToxCast Cellumen a-tubulin:CLM_MicrotubuleCSK_24hr	187.8 uM

ToxCast Cellumen Mito Mem Potential

Result Group

Component Name	Value
ToxCast Cellumen Mito Mem Potential:CLM_MitoMembPot_72hr	130.5 uM

ToxCast Cellumen Mito Mass

Result Group

Component Name	Value
ToxCast Cellumen Mito Mass:CLM_MitoMass_24hr	92.5 uM

ToxCast Cellumen Phospho-H3

Result Group

Component Name	Value
ToxCast Cellumen Phospho-H3:CLM_MitoticArrest_24hr	164.9 uM
ToxCast Cellumen Phospho-H3:CLM_MitoticArrest_72hr	114.8 uM

ToxCast Cellumen Phospho-H2AX

Result Group

Component Name	Value
ToxCast Cellumen Phospho-H2AX:CLM_OxidativeStress_72hr	180.8 uM

ToxCast Cellumen Phospho-c-jun

Result Group

Component Name	Value
ToxCast Cellumen Phospho-c-jun:CLM_StressKinase_1hr	181.5 uM
ToxCast Cellumen Phospho-c-jun:CLM_StressKinase_72hr	118.5 uM

ToxCast CellzDirect CYP2B6

Result Group

Component Name	Value
ToxCast CellzDirect CYP2B6:CLZD_CYP2B6_48	4.315 uM
ToxCast CellzDirect CYP2B6:CLZD_CYP2B6_6	5.9317 uM

ToxCast CellzDirect CYP3A4

Result Group

Component Name	Value
ToxCast CellzDirect CYP3A4:CLZD_CYP3A4_48	3.5325 uM

ToxCast CellzDirect SLCO1B1

Result Group

Component Name	Value
ToxCast CellzDirect SLCO1B1:CLZD_SLCO1B1_24	0.016179 uM

ToxCast GreenScreen

Result Group

Component Name	Value
ToxCast GreenScreen:GreenScreen	100.0 uM

ToxCast NCGC Reporter Gene Assay AR Antagonist

Result Group

Component Name	Value
ToxCast NCGC Reporter Gene Assay AR Antagonist:NCGC_AR_Antagonist	73.0 uM

ToxCast NCGC Reporter Gene Assay ERa Agonist

Result Group

Component Name	Value
ToxCast NCGC Reporter Gene Assay ERa Agonist:NCGC_ERalpha_Agonist	1.723 uM

ToxCast NCGC Reporter Gene Assay ERa Antagonist

Result Group

Component Name	Value
ToxCast NCGC Reporter Gene Assay ERa Antagonist:NCGC_ERalpha_Antagonist	17.0 uM

ToxCast NCGC Reporter Gene Assay PXR Agonist (Human)

Result Group

Component Name	Value
ToxCast NCGC Reporter Gene Assay PXR Agonist (Human):NCGC_PXR_Agonist_human	20.53 uM

ToxCast Novascreen Guinea Pig LTB4

Result Group

Component Name	Value
ToxCast Novascreen Guinea Pig LTB4:NVS_GPCR_gLTB4	38.7 uM

ToxCast Novascreen Human Opiate-D2

Result Group

Component Name	Value
ToxCast Novascreen Human Opiate-D2:NVS_GPCR_hOpiate_D2	26.6 uM

ToxCast Novascreen Human Opiate-mu

Result Group

Component Name	Value
ToxCast Novascreen Human Opiate-mu:NVS_GPCR_hOpiate_mu	35.5 uM

ToxCast Novascreen Human 5HT6

Result Group

Component Name	Value
ToxCast Novascreen Human 5HT6:NVS_GPCR_h5HT6	10.8 uM

ToxCast Novascreen Rat peripheral-type benzodiazepine receptor (PBR)

Result Group

Component Name	Value
ToxCast Novascreen Rat peripheral-type benzodiazepine receptor (PBR):NVS_MP_rPBR	23.9 uM

ToxCast Novascreen CCKB Central Mouse

Result Group

Component Name	Value
ToxCast Novascreen CCKB Central Mouse:NVS_GPCR_mCKKBCentral	37.6 uM

ToxCast Novascreen Bovine ER

Result Group

Component Name	Value
ToxCast Novascreen Bovine ER:NVS_NR_bER	0.739 uM

ToxCast Novascreen Human ER

Result Group

Component Name	Value
ToxCast Novascreen Human ER:NVS_NR_hER	0.707 uM

ToxCast Novascreen Human NET

Result Group

Component Name	Value
ToxCast Novascreen Human NET:NVS_TR_hNET	34.0 uM

ToxCast Novascreen Rat Opiate Non-Selective

Result Group

Component Name	Value
ToxCast Novascreen Rat Opiate Non-Selective:NVS_GPCR_rOpiateNonSelective	33.3 uM

ToxCast Novascreen Rat Opiate Non-Selective Na+

Result Group

Component Name	Value
ToxCast Novascreen Rat Opiate Non-Selective Na+:NVS_GPCR_rOpiateNonSelectiveNa	33.1 uM

ToxCast Novascreen Bovine PR

Result Group

Component Name	Value
ToxCast Novascreen Bovine PR:NVS_NR_bPR	31.0 uM

ToxCast Novascreen Human AR

Result Group

Component Name	Value
ToxCast Novascreen Human AR:NVS_NR_hAR	17.9 uM

ToxCast Novascreen Human GR

Result Group

Component Name	Value
ToxCast Novascreen Human GR:NVS_NR_hGR	10.5 uM

ToxCast Novascreen Rat VMAT2

Result Group

Component Name	Value
ToxCast Novascreen Rat VMAT2:NVS_TR_rVMAT2	19.7 uM

ToxCast Novascreen Human CAR

Result Group

Component Name	Value
ToxCast Novascreen Human CAR:NVS_NR_hCAR	0.111 uM

ToxCast Novascreen Human CYP2C19

Result Group

Component Name	Value
ToxCast Novascreen Human CYP2C19:NVS_ADME_hCYP2C19_Activator	6.57 uM

ToxCast Novascreen Human CYP2C9

Result Group

Component Name	Value
ToxCast Novascreen Human CYP2C9:NVS_ADME_hCYP2C9	5.25 uM

ToxCast Novascreen Human CYP1A1

Result Group

Component Name	Value
ToxCast Novascreen Human CYP1A1:NVS_ADME_hCYP1A1	9.62 uM

ToxCast Novascreen Human CYP2C18

Result Group

Component Name	Value
ToxCast Novascreen Human CYP2C18:NVS_ADME_hCYP2C18	8.88 uM

ToxCast Novascreen Human CYP3A5

Result Group

Component Name	Value
ToxCast Novascreen Human CYP3A5:NVS_ADME_hCYP3A5	10.0 uM

ToxCast Novascreen Rat CYP2A2

Result Group

Component Name	Value
ToxCast Novascreen Rat CYP2A2:NVS_ADME_rCYP2A2	2.59 uM

ToxCast Novascreen Human CYP2J2

Result Group

Component Name	Value
ToxCast Novascreen Human CYP2J2:NVS_ADME_hCYP2J2	12.7 uM

ToxCast Novascreen Rat CYP2C11

Result Group

Component Name	Value
ToxCast Novascreen Rat CYP2C11:NVS_ADME_rCYP2C11	1.26 uM

ToxCast Novascreen Rat CYP2C13

Result Group

Component Name	Value
ToxCast Novascreen Rat CYP2C13:NVS_ADME_rCYP2C13	9.37 uM

ToxCast Novascreen Rat CYP2A1

Result Group

Component Name	Value
ToxCast Novascreen Rat CYP2A1:NVS_ADME_rCYP2A1	7.65 uM

NCI Yeast Anticancer Drug Screen. Data for the rad50 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	2

NCI Yeast Anticancer Drug Screen. Data for the mec2-1 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	2

NCI Yeast Anticancer Drug Screen. Data for the sgs1 mgt1 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	2
PUBCHEM_ACTIVITY_OUTCOME	Inactive

NCI Yeast Anticancer Drug Screen. Data for the cln2 rad14 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	2

NCI Yeast Anticancer Drug Screen. Data for the bub3 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	2

NCI Yeast Anticancer Drug Screen. Data for the mlh1 rad18 strain

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	2

qHTS Assay for Compounds that Induce Erasure of Genomic Imprints

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors and Activators of N370S glucocerebrosidase as a Potential Chaperone Treatment of Gaucher Disease

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors and Activators of Human alpha-Galactosidase From Spleen Homogenate

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors and Activators of Human alpha-Glucosidase From Spleen Homogenate

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Identification of Small Molecule Inducers of Hypoxia Response

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

NCI In Vivo Anticancer Drug Screen. Data for tumor model L1210 Leukemia (intraperitoneal) in B6D2F1 (BDF1) mice

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of the Human Apurinic/apyrimidinic Endonuclease 1 (APE1)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

VP16 counterscreen qHTS for inhibitors of ROR gamma transcriptional activity

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of RecQ-Like Dna Helicase 1 (RECQ1)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS for inhibitors of ROR gamma transcriptional activity

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

NCI In Vivo Anticancer Drug Screen. Data for tumor model L1210 Leukemia (intraperitoneal) in CD2F1 (CDF1) mice

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - BJ

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - Jurkat

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - Hek293

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - HepG2

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - MRC5

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - SK-N-SH

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

IkB Signaling

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of Tyrosyl-DNA Phosphodiesterase (TDP1)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

JNK3 AlphaScreen Assay

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - N2a

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - NIH 3T3

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - HUV-EC-C

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - H-4-II-E

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - SH-SY5Y

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - Renal Proximal Tubule

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - Mesenchymal

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Promiscuous and Specific Inhibitors of AmpC Beta-Lactamase (assay with detergent)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Promiscuous and Specific Inhibitors of AmpC Beta-Lactamase (assay without detergent)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Disrupters of an Hsp90 Co-Chaperone Interaction

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Tau Filament Binding

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of DNA Polymerase III Holoenzyme System

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of YjeE

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) HepG2

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) Jurkat

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) HUV-EC-C

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) SHSY5Y

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) BJ

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) MRC-5

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) Mesangial

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) SK-N-SH

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell signaling CRE-BLA (Fsk stim)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) H-4-II-E

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) Hek293

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) N2a

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) NIH 3T3

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cellular Toxicity (caspase-3) Renal Proximal Tubule

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of BRCT-Phosphoprotein Interaction (Green Fluorophore)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of RGS12 GoLoco Motif Activity (Red Fluorophore)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of 15-hLO-2 (15-human lipoxygenase 2)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors and Substrates of Cytochrome P450 3A4

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Activity inconclusive

qHTS Assay for Activators of Cytochrome P450 3A4

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of HADH2 (Hydroxyacyl-Coenzyme A Dehydrogenase, Type II)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	Activity inconclusive

qHTS Assay for Inhibitors of 15-hLO (15-human lipoxygenase)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Allosteric/Competitive Inhibitors of Caspase-7

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of BRCT-Phosphoprotein Interaction (Red Fluorophore)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of HSD17B4, hydroxysteroid (17-beta) dehydrogenase 4

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of HPGD (15-Hydroxyprostaglandin Dehydrogenase)

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	Activity inconclusive

qHTS Assay for Allosteric/Competitive Inhibitors of Caspase-1

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Screen for Compounds that Selectively Target Cancer Cells with p53 Mutations: Cytotoxicity of p53ts Cells at the Nonpermissive Temperature

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Anthrax Lethal Toxin Internalization

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	Activity inconclusive

Cell Viability - LYMP2-001

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Allosteric/Competitive Inhibitors of Caspase-1: Spectroscopic Profiling in AFC Spectral Region

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Screen for Compounds that Selectively Target Cancer Cells with p53 Mutations: Cytotoxicity of p53ts Cells at the Permissive Temperature

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Modulators of Hemoglobin Beta Chain Splicing

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Agonists of the Thyroid Stimulating Hormone Receptor

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive
PUBCHEM_ACTIVITY_OUTCOME	Activity Unspecified

qHTS Assay for Agonists of the Thyroid Stimulating Hormone Receptor: Activators of Intracellular cAMP Concentrations in Parental HEK 293

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-001 - Dead Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-001 - Live Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP1-002 - Assay at 16 hr

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-002 - Live Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-002 - Dead Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-003 - Dead Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

MultiTox-Fluor Cytotoxicity Assay - LYMP1-003 - Live Cells

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP1-003 - Assay at 24 hr

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP1-003 - Assay at 40 hr

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-003

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-004

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-005

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-009

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-011

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-013

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-015

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-017

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-019

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-021

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-023

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-025

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-002

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-006

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-007

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-008

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-010

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-012

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-014

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-016

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-018

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-020

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-022

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-024

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP2-026

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP1-002 - Assay at 24 hr

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Cell Viability - LYMP1-002 - Assay at 40 hr

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

qHTS Assay for Inhibitors of the ERK Signaling Pathway using a Homogeneous Screening Assay

Result Group

Component Name	Value
PUBCHEM_ACTIVITY_OUTCOME	Inactive

Inherent Chemical Property

ChEMBL chemical property data

Result Group

Component Name	Value
Medicinal Chemistry Friendly?	Y
molecular species	NEUTRAL
Number of Rule of 5 Violations	0
Pass rule of 3	N

DOE: Pertinent physical constants for Protective Action Criteria (PAC) Chemicals

Result Group

Component Name	Value
Boiling Point	220 @ 4mmHg
Molec. Formula	C15H16O2
MP or FP (C)	153
PAC-TEEL Derivation/Review/Revision Dates: Last Reviewed	04/14/09
PAC-TEEL Derivation/Review/Revision Dates: Last Revised	12/31/11
PAC-TEEL Derivation/Review/Revision Dates: Originally Derived	08/21/96
Physical state	S
ppm to mg/m3	9.3305268320595083
SG @ 25C unless indicated	1.1950000000000001
units of original limits	mg/m3
Vapor Pressure mm Hg	3.91x10-7
Vapor Pressure T (C)	25

Environmental Releases from EDSPDB

Result Group

Component Name	Value
AIRHALF	1030
BCF	115
BCF_Rank	37.15352631
BCF_Source	37200
Combined_Rank	37382
H2OHALF	3.180000067
PERSIST	Measured - ISIS BCF
PERS_Rank	3600
SEDHALF	900
SOILHALF	900
Sum_of_Ranks	67

Melting Point from EPA HPVIS

Result Group

Component Name	Value
GLP	No
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Estimated by Supporting Chemical
Study Reference	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; MPBPWIN Program Version 1.41; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	The EPIWIN model was not run with any physico-chemical propertyinput values. The CAS Numbers were entered for the individualchemicals below and the model data used.
Test Substance Result Type	Estimated
Test Value Units	C

Result Group

Component Name	Value
GLP	Unknown
Melting Indicator	Melts
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Study Reference	As cited in the EU Risk Assessment:Sax N.I. and Lewis R.J. 1996. Sax's Dangerous Properties of IndustrialMaterials 9th Edition. New York. London. Van Nostrand Reinhold.Pohanish R.P. and Greene S.A. 1996. Hazardous Materials Handbook.New York. London. Van Nostrand Rheinhold.IPCS. 1993. Bisphenol-A; International Chemical Safety Cards 8thSeries prepared by IPCS. International Programme on Chemical Safety(IPCS).Merck Index. 1989. The Merck Index. an Encyclopedia of ChemicalsDrugs and Biologicals. 11th Edition. Budavari S. et al. (eds) Rahway N.J. Merck & Co.Hubbard N.W. et al. 1948. J. Am. Chem. Soc.70:3259-3261.Bayer Leverkusen. 1989.Ullmann's Encyclopedia of Industrial Chemistry. 1991. Encyclopedia ofIndustrial Chemistry. 5th completely revised edition. Gerhartz W. (ed) Weinheim. VCH.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Method not specified
Test Value Units	C

Boiling Point data from EPA HPVIS

Result Group

Component Name	Value
Boiling Indicator	17
GLP	Unknown
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Von Braun. 1925. ANN. 472:65.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Study Reference	Von Braun. 1925. ANN. 472:65.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Not specified
Test Value Units	C

Result Group

Component Name	Value
Boiling Indicator	101.3
GLP	Unknown
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics

Sponsored Chemical Result Type	DIPPR. 1994. Physical and Thermodynamic Properties of PureChemicals Data Compilation. Taylor and Francis.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Study Reference	DIPPR. 1994. Physical and Thermodynamic Properties of PureChemicals Data Compilation. Taylor and Francis.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	Not specified
Test Value Units	C

Result Group

Component Name	Value
Boiling Indicator	760
GLP	No
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; MPBPWIN Program Version 1.41; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Study Reference	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; MPBPWIN Program Version 1.41; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Conditions Remarks	The EPIWIN model was not run with any physico-chemical property input values. The CAS Numbers were entered for the individual chemicals below and the model data used.
Test Substance Result Type	Estimated
Test Value Units	C

Vapor Pressure data from EPA HPVIS

Result Group

Component Name	Value
GLP	Unknown
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Estimated by Calculation
Study Reference	Bayer AG. 1988. Manufacturers Safety Data Sheet.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Temperature Unit	C
Test Conditions Remarks	Calculated
Test Substance Result Type	Estimated
Test Value Units	hPa

Result Group

Component Name	Value
GLP	No
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Estimated by Calculation
Study Reference	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; MPBPWIN Program Version 1.41; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Temperature Unit	C
Test Conditions Remarks	Calculated. The EPIWIN model was not run with any physico-chemical propertyinput values. The CAS Numbers were entered for the individual chemicals below and the model data used.
Test Substance Result Type	Estimated
Test Value Units	hPa

Partition Coefficient data from EPA HPVIS

Result Group

Component Name	Value
GLP	Not Applicable
Program Flag	HPVIS
Reliability	2
Results Remarks	Temperature not reported

Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Measured
Study Reference	Bayer AG. 1993. Material Safety Data Sheet.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Substance Purity	Method not specified
Test Substance Result Type	Measured

Result Group

Component Name	Value
GLP	No
Program Flag	HPVIS
Reliability	2
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Estimated by Supporting Chemical
Study Reference	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; KOWWIN Program Version 1.67; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Temperature Unit	C
Test Substance Purity	The EPIWIN model was not run with any physico-chemical propertyinput values. The CAS Numbers were entered for the individual chemicals below and the model data used.
Test Substance Result Type	Estimated

Water Solubility data from EPA HPVIS

Result Group

Component Name	Value
GLP	Unknown
Program Flag	HPVIS
Reliability	2
Results Remarks	Description: Of very low solubility. At room temperature.
Sponsor Name	General Electric Company - Plastics
Study Reference	Bayer AG. 1988. Manufacturers Safety Data Sheet.Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Test Substance Purity	Method not specified
Test Value Units	mg/L

Result Group

Component Name	Value
GLP	Not Applicable
Program Flag	HPVIS
Reliability	2
Results Remarks	Indicator not applicable
Sponsor Name	General Electric Company - Plastics
Sponsored Chemical Result Type	Estimated by Supporting Chemical
Study Reference	U.S. EPA (Environmental Protection Agency). 2005. EPI Suite(TM) Version 3.12; WSKOWWIN Program Version 1.41; PC-Computer software developed by EPA's Office of Pollution Prevention Toxics and Syracuse Research Corporation (SRC).Posting dates of the documents from the HPV Challenge Program website from which data have been entered into the HPVIS:Test Plan: Nov. 15 2006; CBIC Received: Nov. 22 2006Robust Summary: Nov. 15 2006; CBIC Received: Nov. 22 2006
Submission Name	2-Propanone reaction products with phenol
Submitter's Name	Toxicology/Regulatory Services Inc.
Temperature Unit	C
Test Substance Purity	The EPIWIN model was not run with any physico-chemical propertyinput values. The CAS Numbers were entered for the individual chemicals below and the model data used.
Test Substance Result Type	Estimated
Test Value Units	mg/L

EPA mid-Atlantic Region Chemical Parameters

Result Group

Component Name	Value
Diffusivity in air (Dia)	0.0508662
Diffusivity in water (Diw)	5.9433e-06
Dimensionless Henry's Law Constant (H')	3.745e-10
Henry's Law Constant (HLC)	9.16e-12
Molecular Weight Source	EPI
Permeability Coefficient reference	EPI
Reference for Henry's Law Constants	EPI
Source for Diffusivity in air. See source for literature references	WATER9
Source for Diffusivity in water	WATER9
Source for Soil organic carbon-water partition coefficient (Koc)	EPI
Source for Water Solubility Limit (S)	EPI

EPA Region 9 Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites.

Result Group

Component Name	Value
Molecular Weight Source	EPI
Reference for Henry's Law Constant	EPI
Source for Diffusivity in air and water	WATER9 (U.S. EPA, 2001)
Source for Permeability Coefficient	EPI
Source for Soil organic carbon-water partition coefficient (Koc)	EPI
Source for Water Solubility Limit (S)	EPI
Source Water Partition Coefficient (log Kow)	EPI

EWG Human Toxome Project chemical class

Result Group

Component Name	Value
Chemical Class	Bisphenol A and BADGE

Summary of Physico-chemical properties of selected phenols studied in the Nordic environment

Result Group

Component Name	Value
Log Kow	2.2-3.8
MP	150-155
Source	(4) EU IUCLID (http://ecb.jrc.it/documentation/)
VP	4.1E-7/25
Wsol	120-300/25

Result Group

Component Name	Value
Log Kow	3.32
MP	156
Source	(5) NITE (http://www.safe.nite.go.jp/english/Haz_start.html)
VP	5E-6/20
Wsol	120/25

Result Group

Component Name	Value
Log Kow	3.4
MP	130
Source	(7) US-EPA PBT Profiler (http://www.pbtprofiler.net/default.asp/);
VP	5.2E-5/25
Wsol	170

Pennsylvania DEP Chemical and Physical Properties for Regulated Substances

Result Group

Component Name	Value
Boiling point	220
Source for Water Solubility	4

Chemical and Physical properties from Risk Assessment Information System (RAIS)

Result Group

Component Name	Value
Absorption Factor, Dermal	1.00E-01
Beef Transfer Coeff.	5.22E-05
Density	-
Diffusivity in Air	5.09E-02
Diffusivity in Water	5.94E-06
Fish Bioacc. Factor	4.38E+01
GI Absorption Factor	1.00E+00
Log of Octanol-Water Partition Coef.	3.32E+00
Melting Point	1.53E+02
Milk Transfer Coeff.	1.65E-05
Molecular Weight	2.28E+02
Organic Carbon Partition Coef.	3.77E+04
Reference for Beef Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Boiling Point	LANGE
Reference for Diffusivity in Air	WATER9 (U.S. EPA, 2001)
Reference for Diffusivity in Water	WATER9 (U.S. EPA, 2001)
Reference for Fish Bioacc. Factor	EPI
Reference for Log of Octanol-Water Partition Coef.	EPI
Reference for Melting Point	EPI
Reference for Milk Transfer Coeff.	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Molecular Weight	EPI
Reference for Organic Carbon Partition Coef.	EPI
Reference for Skin Permeability Constant	EPI
Reference for Soil-to-Dry Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463

Reference for Soil-to-Wet Plant Uptake	McKone, T. E. 1994. Uncertainty and variability in human exposures to soil contaminantsthrough home-grown food: a Monte Carlo assessment. Risk Anal. 14(4):449-463
Reference for Unitless Henry's Law Constant	EPI
Reference for Vapor Pressure	EPI
Reference for Water Solubility	EPI
Skin Permeability Constant	1.32E-02
Soil-Water Partition Coef.	-
Unitless Henry's Law Constant	3.74E-10
Vapor Pressure	2.27E-07
Water Solubility	1.20E+02

Summary of Biodegradation experimental results conducted aerobically from SRC

Result Group

Component Name	Value
Biological Treatment Simulation	Biodegrades fast w/acclimation-Only one test or uninterpretable, conflicting data
Grab sample - water	Biodegrades fast w/acclimation-Chemical tested in three or more tests consistent results
Overall summary	Biodegrades slow-Chemical tested in three or more tests consistent results
Screening test	Biodegrades slow -Chemical tested in two tests, or results in more than two tests are interpretable, but conflicting data

Results of Testing under TSCA Section 4

Result Group

Component Name	Value
Dose/concentration	5.4, 8.2, 13.0, 20.0, 30.0 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	Non-TSCA Protocol/Guideline
Reference	The 96-hour LC5O Value was 9.4 mg/L with its correspondmg 95% confidence interval between 8.3-11.0 mg/L.
Species	Atlantic silverside
Study Code/type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.51, 0.86, 1.4, 1.9 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1930
Reference	The 96-hour LC50 value was calculated to be 1.1 mg/l with a correspondmg 95% confidence interval between 0.92 and 1.2 mg/L. After 96 hours, one mortality was observed in the control group. Mortality of 20% was observed at a concentration of 0.86 mg/L in the exposed population.
Species	Mysid shrimp
Study Code/type	EEATOX Mysid shrimp acute toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	1.00, 1.54, 2.37, 3.65 5.62, 8.65 mg/L (nominal)
Exposure	96 hr, flow-through
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1400
Reference	The 96-hour LC50 and 95% confidence interval values were 4.7 and 3.6-5.4 mg/L respectively. At the 3.58 mg/L exposure level, 9 out of the 10 test animals experienced loss of equilibrium at the 24 hour mark. The test animals however, continued to recover throughout the remainder of the test and appeared normal at the end of the study.
Species	Fathead minnows
Study Code/type	EEATOX Acute fish toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.93, 1.55, 2.60, 4.32, 7.20, 12.0, 20.0 mg/L (nominal)
Exposure	48 hr, static
No. per group	Not specified
Protocol/Guideline	40 CFR 797.1300
Reference	The EC50 Value and 95% confidence interval were 10.2 mg/L and 9.2-ll.4 mg/L respectively. significant toxic effect at or below analyzed test concentration of 6.97 mg/L. There was no significant toxic effect at or below analyzed test concentrations pf 6.97 mg/L.
Species	Daphnid magna
Study Code/type	EEATOX Acute invertebrate toxicity (voluntary test)

Result Group

Component Name	Value
Dose/concentration	0.78,1.30,2.16,3.6 6.0, 10.0 mg/L (nominal)
Exposure	96 hr, static
No. per group	Not applicable
Protocol/Guideline	40 CFR 797.1050
Reference	Algal growth was inhibited at concentrations of 1.99 mg/L and higher. The EC50 Values were based on 50% inhibition of cell count and total cell Volume compared to the controls. The 96-hour EC50 Values were 2.73 and 3.10 mg/L.
Species	green algae
Study Code/type	EEATOX Algae acute toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	1000 and 2000 ppm
Exposure	Diet, 103 weeks
No. per group	50 Inale, 50 female at each concentration.
Protocol/Guideline	National Toxicology Program (NTP)
Reference	No convincmg evidence of carcinogenicity. Mean body weight of all groups of rats were lower than controls, probably due to lower food consumption. Leukemias occurred at increased incidence in both sexes, but the increase was marginally significant in males and not statistically significant in females. A statistically significant increase in interstitial-cell tumors of the testes in male rats was suggestive of but was not considered convincmg evidence of a compound-related effect because this lesion normally occurs in high incidence in aging F344 rats.
Species	F344 rats
Study Code/type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	Value
Dose/concentration	1000, 5000, 10,000 ppm
Exposure	Diet, 103 weeks
No. per group	50 male/ 1000 or 5000 ppm; 50 female/ 5000 or 10,000 ppm
Protocol/Guideline	National Toxicology Pro gram (NTP)
Reference	No convincmg evidence of carcinogenicity. In male mice, there was an increased incidence of leukemias or lymphomas, but this was not statistically significant. There was a compound-related increase in incidence of multinucleated giant hepatocytes in male mice, but there were no increase of liver tumors.
Species	B6C3F1 mice
Study Code/type	HECTOXCARC Carcinogenicity study

Result Group

Component Name	Value
Dose/concentration	0, 10.0, 50.0, 150 mg/m3
Exposure	Inhalation 6 hr/d, 2 wk
No. per group	20/sex
Protocol/Guideline	40 CFR 798.2450 (modified)
Reference	No mortalities were observed at any concentration level. Clinical observations include a porphyrin like material around the nose of males exposed to 50 or 150 mg/m3. Perineal soilmg was observed in females exposed to 150 mg/m3. Males exposed to 150 mg/m3 had statistically significant decreases in body weight gain which returned to normal limits within one week following exposure. Histological observations included minor inflammation of the epithelial lining of the nasal cavity in males exposed to 150 mg/m3, and in females exposed to 50 or 150 mg/m3. Very slight hyperplasia of squamous epithelium in the nasal cavity were observed in males and females exposed to 50 or 150 mg/m3. All treatment related changes were reversible within the 29-day recovery period.
Species	rats
Study Code/type	HESTOX Subchronic inhalation toxicity (Voluntary test)

Result Group

Component Name	Value
Dose/concentration	0, 10, 50, 150 mg/m3
Exposure	6 hr/d; 5 d/wk; 13 weeks, inhalation, whole-body exposure
No. per group	30/sex
Protocol/Guideline	40 CFR 798.2450 (modified)
Reference	No mortalities were seen at any level. Decreased body weight gain and perineal soiling from urine and porphyrin- like material around the nose and eyes were noted at all concentrations. Except for decreased body weight of high dose males, all effects disappeared shortly after cessation of exposure. Transient epithelial hyperplasia and chronic inflammation of nasal submucosa were seen in mid- and high-dose animals.
Species	rats
Study Code/type	HESTOX Subchronic inhalation toxicity

USGS Study of endocrine-active chemicals and other organic chemicals indicative of wastewater in rivers in Minnesota

Result Group

Component Name	Value
Grindstone River below Hinckley, MN	<0.4
Grindstone River below Hinckley, MN	<0.4
Grindstone River near Hinckley, MN	<0.4
Grindstone River near Hinckley, MN	<0.4
Hinckley WWTP near Hinckley, MN	<0.4
Hinckley WWTP near Hinckley, MN	E0.0850
Hinckley WWTP near Hinckley, MN (replicate sample)	<0.4
Hutchinson WWTP outflow at Hutchinson, MN	<0.4
Hutchinson WWTP outflow at Hutchinson, MN	<0.4
Marshall WWTP outflow at Marshall, MN	<0.4
Marshall WWTP outflow at Marshall, MN	<0.4
North Branch Grindstone River near Hinckley, MN	<0.4
North Branch Grindstone River near Hinckley, MN	<0.4
Redwood River at 280th Ave. near Marshall, MN	<0.4
Redwood River at 280th Ave. near Marshall, MN	<0.4
Redwood River below WWTP near Marshall, MN	<0.4
Redwood River below WWTP near Marshall, MN	<0.4
Redwood River below WWTP near Marshall, MN (Replicate sample)	<0.4
Redwood River near Marshall, MN	<0.4
Redwood River near Marshall, MN	<0.4
South Branch Grindstone River near Hinckley, MN	<0.4
South Branch Grindstone River near Hinckley, MN	<0.4
South Fork Crow River above Otter Lake near Hutchinson, MN	<0.4

South Fork Crow River above Otter Lake near Hutchinson, MN	<0.4
South Fork Crow River at Hwy. 22 near Biscay, MN	<0.4
South Fork Crow River at Hwy. 22 near Biscay, MN	<0.4
South Fork Crow River below Hutchinson, MN	<0.4
South Fork Crow River below Hutchinson, MN	<0.4

Properties of endocrine-active chemicals and other organic chemicals monitored by USGS in three rivers in Minnesota in 2007

Result Group

Component Name	Value
Classification	USGS-NRP wastewater indicators (ng/L)
Endocrine disrupting potential (EDP)	K
MRL	5
Possible compound uses or sources	FR, manuf. polycarbonate resins, antioxidant.

USGS Study of endocrine-active chemicals and other organic chemicals indicative of wastewater in rivers in Minnesota

Result Group

Component Name	Value
Grindstone River below Hinckley, MN	<5
Grindstone River below Hinckley, MN	<5
Grindstone River below Hinckley, MN	18.421346432957463
Grindstone River below Hinckley, MN	<5
Grindstone River below Hinckley, MN	<5
Grindstone River below Hinckley, MN	<5
Grindstone River near Hinckley, MN	6.5624692384254448
Grindstone River near Hinckley, MN	<5
Grindstone River near Hinckley, MN	<5
Grindstone River near Hinckley, MN	<5
Grindstone River near Hinckley, MN	<5
Grindstone River near Hinckley, MN	<5
Hinckley WWTP near Hinckley, MN	17.420819565266257
Hinckley WWTP near Hinckley, MN	8.6085538642279147
Hinckley WWTP near Hinckley, MN	<5
Hinckley WWTP near Hinckley, MN	8.2050440508302476
Hinckley WWTP near Hinckley, MN	32.489740082079344
Hinckley WWTP near Hinckley, MN	27.308067124299896
Hinckley WWTP near Hinckley, MN (replicate sample)	11.449507671170139
Hutchinson WWTP outflow at Hutchinson, MN	88
Hutchinson WWTP outflow at Hutchinson, MN	52.693792101627814
Hutchinson WWTP outflow at Hutchinson, MN	23.353573096683792
Hutchinson WWTP outflow at Hutchinson, MN	5.9550233328641502
Hutchinson WWTP outflow at Hutchinson, MN	<5
Hutchinson WWTP outflow at Hutchinson, MN (replicate sample)	63.772004090204405
Marshall WWTP outflow at Marshall, MN	9.8860502627608096
Marshall WWTP outflow at Marshall, MN	6.806912957496202
Marshall WWTP outflow at Marshall, MN	4.8744028856465089
Marshall WWTP outflow at Marshall, MN	19.163410661244132
Marshall WWTP outflow at Marshall, MN	11.992420790060679
Marshall WWTP outflow at Marshall, MN (replicate sample)	<5
North Branch Grindstone River near Hinckley, MN	9.2987694628410846
North Branch Grindstone River near Hinckley, MN	5.8095823935479469
North Branch Grindstone River near Hinckley, MN	<5
North Branch Grindstone River near Hinckley, MN	<5
North Branch Grindstone River near Hinckley, MN	<5
North Branch Grindstone River near Hinckley, MN	<5
Redwood River at 280th Ave. near Marshall, MN	8.0969037440082907
Redwood River at 280th Ave. near Marshall, MN	<5
Redwood River at 280th Ave. near Marshall, MN	<5
Redwood River at 280th Ave. near Marshall, MN	<5
Redwood River at 280th Ave. near Marshall, MN	9.237875288683604
Redwood River at 280th Ave. near Marshall, MN	14.181178739576836
Redwood River below WWTP near Marshall, MN	12.795446868186424
Redwood River below WWTP near Marshall, MN	<5
Redwood River below WWTP near Marshall, MN	<5
Redwood River below WWTP near Marshall, MN	<5
Redwood River below WWTP near Marshall, MN	11
Redwood River below WWTP near Marshall, MN	6.0602053858698053
Redwood River below WWTP near Marshall, MN (replicate sample)	5.0998105784642291
Redwood River near Marshall, MN	23.121778459525611
Redwood River near Marshall, MN	15.107296137339056
Redwood River near Marshall, MN	<5
Redwood River near Marshall, MN	<5
Redwood River near Marshall, MN	7.613661083315205
Redwood River near Marshall, MN	<5
Redwood River near Marshall, MN (replicate sample)	7.7588821566870987
South Branch Grindstone River near Hinckley, MN	137.39935630807395
South Branch Grindstone River near Hinckley, MN	<5
South Branch Grindstone River near Hinckley, MN	14.617593317671627

South Branch Grindstone River near Hinckley, MN	<5
South Branch Grindstone River near Hinckley, MN	20.021645021645018
South Branch Grindstone River near Hinckley, MN	6.4084638329604768
South Fork Crow River above Otter Lake near Hutchinson, MN	14.22148319130083
South Fork Crow River above Otter Lake near Hutchinson, MN	<5
South Fork Crow River above Otter Lake near Hutchinson, MN	<5
South Fork Crow River above Otter Lake near Hutchinson, MN	<5
South Fork Crow River above Otter Lake near Hutchinson, MN	<5
South Fork Crow River above Otter Lake near Hutchinson, MN	<5
South Fork Crow River at Hwy. 22 near Biscay, MN	18.456375838926174
South Fork Crow River at Hwy. 22 near Biscay, MN	10.324987894841779
South Fork Crow River at Hwy. 22 near Biscay, MN	<5
South Fork Crow River at Hwy. 22 near Biscay, MN	<5
South Fork Crow River at Hwy. 22 near Biscay, MN	17.037710131758296
South Fork Crow River at Hwy. 22 near Biscay, MN	14.822247052653179
South Fork Crow River below Hutchinson, MN	49.144560615225089
South Fork Crow River below Hutchinson, MN	9.7030158410717888
South Fork Crow River below Hutchinson, MN	7.2687247541613447
South Fork Crow River below Hutchinson, MN	16.580903373356207
South Fork Crow River below Hutchinson, MN	18.945545090397314
South Fork Crow River below Hutchinson, MN	65.54474969748577
Units	ng/L

USGS: Properties of Endocrine Active Compounds in the Mississippi River 2006

Result Group

Component Name	**Value**
Comments	The concentration of these compounds in water samples is estimated if the spike recovery or expected continuing calibration verification (CCV) concentrations for each set of samples are not within control limits. Compounds with low recovery, unstable instrument response, reference standard prepared from a technical mixture, or potential blank contamination for bed-sediment analyses.
Compound analyzed in bed sediment	Yes
Compund analyzed in Water	Yes
EDP	K
Possible compound uses or sources	Manufacturing polycarbonate resins, antioxidant, FR (flame retardant)

USGS Study of endocrine-active chemicals chemicals in the upper Mississippi R1ver 2006

Result Group

Component Name	**Value**
Mississippi River at Mile 788 near Red Wing, Minn.	<1
Mississippi River at Willow Beach at Ball Club, Minn.	<1
Mississippi River (Lake Pepin) above Lake City, Minn.	<1
Mississippi River (Lake Pepin) above Read's Landing. Minn.	<1
Mississippi River (Lake Pepin) at Mile 771 near Lake City, Minn.	<1
Mississippi River above Coon Rapids Dam in Coon Rapids, Minn.	<1
Mississippi River above Minnesota River at Fort Snelling, Minn.	<1
Mississippi River above Monticello, Minn.	<1
Mississippi River above Pike Creek at Little Falls, Minn.	<1
Mississippi River above Plum Creek near Clearwater, Minn.	<1
Mississippi River at 11th Avenue, in St. Paul Park, Minn.	<1
Mississippi River at Brownsville, Minn.	<1
Mississippi River at Dayton, Minn.	<1
Mississippi River at Elk River, Minn.	<1
Mississippi River at Grand Rapids, Minn.	<1
Mississippi River at Highway 494, in Newport, Minn.	<1
Mississippi River at I-35E Bridge in St. Paul, Minn.	<1
Mississippi River at Lake Itasca, Minn.	<1
Mississippi River at Lock and Dam 3 near Red Wing, Minn.	<1
Mississippi River at Lock and Dam 5A near Winona, Minn.	<1
Mississippi River at Lock and Dam 7 near La Crescent, Minn.	<1
Mississippi River at mile 746 near Buffalo, Wisc.	<1
Mississippi River at Nininger, Minn.	<1
Mississippi River at Palisade, Minn.	<1
Mississippi River at Sauk Rapids, Minn.	<1
Mississippi River at South St. Paul, Minn	<1
Mississippi River at State Hwy 197 in Bemidiji, Minn.	<1
Mississippi River at Winona, Minn.	<1
Mississippi River below Brainerd, Minn.	<1
Mississippi River below Clay Street at Hastings, Minn.	<1
Mississippi River below County Highway 1 in Aitkin, Minn.	<1
Mississippi River below Days High Landing near Deer River, Minn.	<1
Mississippi River below Jacobson, Minn.	<1
Mississippi River below Lock and Dam 4 at Alma, Wisc.	<1
Mississippi River below Lock and Dam 6 near Trempealeau, Wisc.	<1
Mississippi River below Mission Creek near Trommald, Minn.	<1
Mississippi River below Rice, Minn.	<1
Mississippi River near Anoka, Minn.	2.76
Mississippi River near Fort Ripley, Minn.	<1

Mississippi River near Philbin, Minn.	<1
Mississippi River near Schley, Minn.	<1

Endocrine-active chemicals monitored by USGS in sediments of the upper Mississippi River in 2006

Result Group

Component Name	Value
Mississippi River at 11th Avenue, in St. Paul Park, Minn.	E18.2200
Mississippi River at Highway 494, in Newport, Minn.	E11.0000

Wikipedia

Result Group

Component Name	Value
Wikipedia Chemical Pages	*External Link*

Use

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	3070

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	03070

California DPR registered pesticides

Result Group

Component Name	Value
DPR Code	03070

CAL OCWD trace organics in Santa Ana River and comparison to Health Risk-Based Screening Levels

Result Group

Component Name	Value
Concentration, max.	ND
Concentration,min.	ND
Freq	0/4
Health Risk-Based DWEL	1800
lab	MWD & OCWD
Max (or MRL) > DWEL?	No
MRL	1
Source of DWEL	U.S. EPA (1993c) RfD; Snyder et al. (2008) ADI
Status	Non-Detected Compounds

ChEMBL chemical property data

Result Group

Component Name	Value
Medicinal Chemistry Friendly?	Y
molecular species	NEUTRAL
Number of Rule of 5 Violations	0
Pass rule of 3	N

Chemical Substances from Sanitary Napkins

Result Group

Component Name	Value
Sanitary napkin A	-
Sanitary napkin A - repeat of measurements	-
Sanitary napkin B	-
Sanitary napkin B - repeat of measurements	-
Sanitary napkin C	-
Sanitary napkin C - repeat of measurements	-
Sanitary napkin D	-
Sanitary napkin D - repeat measurements	-
Sanitary napkin D'	-
Sanitary napkin D' - repeat of measurements	-
Sanitary napkin E	-
Sanitary napkin E - repeat of measurements	-
Sanitary napkin E'	-
Sanitary napkin E' - repeat of measurements	-
Sanitary napkin F	-
Sanitary napkin F - repeat of measurements	-
Toxicological profile prepared	NO

Literature Survey for Substances which may be emitted from Electric and Electronic Equipment

Result Group

Component Name	Value
Electrical appliance I URL	*External Link*

Chemical Substances in Paper Handkerchiefs and Toilet Paper

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Result Group

Component Name	Value
Paper Handkerchiefs and Toilet Paper URL	*External Link*

Survey and health assesment of chemicals substances in sex toys.

Result Group

Component Name	Value
Sex toys URL	*External Link*

Survey of chemical substances in headphones and hearing protection aids

Result Group

Component Name	Value
Headphones and hearing protection aids URL	*External Link*

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - Pacifiers

Result Group

Component Name	Value
Product type	Pacifier cover
Sample 5-1	1900
Sample 5-2	1700
Sample 5-3	1600
Sample 5-4	1000
Sample 5-5	1000

Survey and Health Assement of the exposure of 2-year-olds to chemical substances in Consumer Products - PacifiersI

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Sweat
Product type and number	5-1, Pacifier (coverage)
Quantitative analysis	106
Screening analysis	1900

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-1, Pacifier (coverage)

Result Group

Component Name	Value
Migration analysis	7*
Migration fluid	Sweat
Product type and number	5-3, Pacifier (coverage)
Quantitative analysis	280
Screening analysis	1600

Result Group

Component Name	Value
Migration analysis	Substance not detected
Migration fluid	Saliva
Product type and number	5-3, Pacifier (coverage)

Dow Chemical Safety

Result Group

Component Name	Value
Dow Chemical Safety Assessment URL	*External Link*

Result Group

Component Name	Value
Dow Chemical Safety Assessment URL	*External Link*

EDSPDB Occupational Exposure Data

Result Group

Component Name	Value
NOES_SumOfFACIL	5990
NOES_SumOfWORKERS	92137
PELComments	FALSE
PELPublished	770
RELComments	FALSE

EPA 2012 Chemical Data Reporting (CDR)

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	< 10
C_PCT_PROD_VOLUME	100
IMPORTED_LB	16117690
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	910 Sylvan Ave
PARENT_CITY	Englewood Cliffs
PARENT_COMPANY_NAME	LG INTERNATIONAL AMERICA INC
PARENT_STATE	NJ
PARENT_ZIP	07632
PAST_PROD_VOLUME	20304574.3
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	13105
PRODUCT_CATEGORY	Electrical and Electronic Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	13134
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	13134
SITE_ADDRESS	910 Sylvan Avenue
SITE_CITY	Englewood Cliffs
SITE_COUNTY	Bergen
SITE_NAME	LG Chemical America
SITE_STATE	NJ
SITE_ZIP	07632
SUBMITTER_FIRST_NAME	Peter
SUBMITTER_LAST_NAME	Park
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	100
IMPORTED_LB	485017
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	335 Madison Avenue
PARENT_CITY	New York
PARENT_COMPANY_NAME	ITOCHU INTERNATIONAL INC
PARENT_COUNTY	New York
PARENT_STATE	NY
PARENT_SUPPLEMENTAL_ADDRESS	23rd Fl
PARENT_ZIP	10017
PAST_PROD_VOLUME	88185
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	16489
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	16491
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	16491
SITE_ADDRESS	360 HAMILTON AVENUE, 6TH FLOOR
SITE_CITY	WHITE PLAINS, NEW YORK
SITE_COUNTY	Westchester
SITE_NAME	ITOCHU CHEMICALS AMERICA INC. (HEAD OFFICE)
SITE_STATE	NY
SITE_ZIP	10601-1811
SUBMITTER_FIRST_NAME	Kisae
SUBMITTER_LAST_NAME	Kakefu
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO

CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	17890
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	17890
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	17888
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	17890
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	17890
SITE_ADDRESS	5900 Highway 225 Gate 7B
SITE_CITY	Deer Park
SITE_COUNTY	Harris
SITE_NAME	Momentive Specialty Chemicals - Deer Park
SITE_STATE	TX
SITE_ZIP	77536
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50

DOM_MFG_LB	CBI
MAX_CONCENTRATION	30% - < 60%
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
PRODUCT_CATEGORY	Adhesives and Sealants
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	87857
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	87857
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	1% - < 30%
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	50
DOM_MFG_LB	CBI
MAX_CONCENTRATION	30% - < 60%
NUM_WORKERS	25 - 49
PARENT_ADDRESS	629 Oakmont Ave
PARENT_CITY	Westmont
PARENT_COMPANY_NAME	Momentive Specialty Chemicals
PARENT_COUNTY	Dupage
PARENT_STATE	IL
PARENT_ZIP	60559
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, OtherSolid
PRIMARY_FORM_ID	87468
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	87857
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	87857
SITE_ADDRESS	2525 SOUTH COMBEE ROAD
SITE_CITY	LAKELAND
SITE_COUNTY	Polk
SITE_NAME	MOMENTIVE SPECIALTY CHEMICALS INC
SITE_STATE	FL
SITE_ZIP	33801-6865
SUBMITTER_FIRST_NAME	Danielle
SUBMITTER_LAST_NAME	Svestka
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	Not Known or Reasonably Ascertainable
CONS_COMM_OPTION	Not Known or Reasonably Ascertainable
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	100
IMPORTED_LB	370373
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	600 Stewart Street
PARENT_CITY	Seattle
PARENT_COMPANY_NAME	TRINTERNATIONAL INC

PARENT_COUNTY	King
PARENT_STATE	WA
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1801
PARENT_ZIP	98101
PAST_PROD_VOLUME	28660
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	88772
PRODUCT_CATEGORY	Not Known or Reasonably Ascertainable
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	88800
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	88800
SITE_ADDRESS	600 Stewart Street Suite 1801
SITE_CITY	Seattle
SITE_COUNTY	King
SITE_NAME	TRInternational INc
SITE_STATE	WA
SITE_ZIP	98101
SUBMITTER_FIRST_NAME	Sandra
SUBMITTER_LAST_NAME	Fuller
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Ms.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	CBI
CONS_COMM_OPTION	CBI
C_MAX_CONCENTRATION	CBI
C_NUM_WORKERS	CBI
C_PCT_PROD_VOLUME	CBI
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUM_WORKERS	< 10
PARENT_ADDRESS	2000 Town Center Suite 1450
PARENT_CITY	Southfield
PARENT_COMPANY_NAME	IDEMITSU CHEMICALS USA CORP
PARENT_COUNTY	Oakland
PARENT_STATE	MI
PARENT_SUPPLEMENTAL_ADDRESS	Suite 1450
PARENT_ZIP	48075
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	104579
PRODUCT_CATEGORY	CBI
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	104625
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	104625
SITE_ADDRESS	2000 TOWN CENTER
SITE_CITY	SOUTHFIELD
SITE_COUNTY	Oakland
SITE_NAME	IDEMITSU CHEMICALS CORP.
SITE_STATE	MI
SITE_ZIP	48075-1135
SUBMITTER_FIRST_NAME	Shintaro
SUBMITTER_LAST_NAME	Suzuki
SUBMITTER_SUFFIX	None
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	CBI
PARENT_ADDRESS	1007 Market Street
PARENT_CITY	Wilmington
PARENT_COMPANY_NAME	E I DU PONT DE NEMOURS & CO
PARENT_COUNTY	New Castle
PARENT_STATE	DE
PARENT_ZIP	19898
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	274261

P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	276713
SITE_ADDRESS	1007 MARKET ST.
SITE_CITY	WILMINGTON
SITE_COUNTY	New Castle
SITE_NAME	E.I DUPONT DE NEMOURS AND COMPANY
SITE_STATE	DE
SITE_ZIP	19898
SUBMITTER_FIRST_NAME	James
SUBMITTER_LAST_NAME	Romine
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	B
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI
IMPORTED_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	384445
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	384629
SITE_ADDRESS	1 LEXAN LN
SITE_CITY	MOUNT VERNON
SITE_COUNTY	Posey
SITE_NAME	SABIC INNOVATIVE PLASTICS MT. VERNON, LLC
SITE_STATE	IN
SITE_ZIP	476209364
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1 Plastics Ave
PARENT_CITY	Pittsfield
PARENT_COMPANY_NAME	SABIC INNOVATIVE PLASTICS US LLC
PARENT_COUNTY	Berkshire
PARENT_STATE	MA
PARENT_ZIP	01201
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	389290
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	389305
SITE_ADDRESS	ONE PLASTICS DR
SITE_CITY	BURKVILLE
SITE_COUNTY	Lowndes
SITE_NAME	SABIC US INNOVATIVE PLASTICS LLC
SITE_STATE	AL
SITE_ZIP	36752-4001
SUBMITTER_FIRST_NAME	Matthew
SUBMITTER_LAST_NAME	Morrison
SUBMITTER_MIDDLE_INITIAL	A
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	0
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
DOM_MFG_LB	CBI

MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder, Liquid
PRIMARY_FORM_ID	395776
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	396536
SITE_ADDRESS	2310 N Brasoport Blvd
SITE_CITY	Freeport
SITE_COUNTY	Brazoria
SITE_NAME	The Dow Chemical Company - Freeport
SITE_STATE	TX
SITE_ZIP	77541
SUBMITTER_FIRST_NAME	Imogene
SUBMITTER_LAST_NAME	Treble
SUBMITTER_TITLE	Dr.
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	1% - < 30%
NUM_WORKERS	< 10
PARENT_ADDRESS	2020 Dow Center
PARENT_CITY	Midland
PARENT_COMPANY_NAME	DOW CHEMICAL CO
PARENT_COUNTY	Midland
PARENT_STATE	MI
PARENT_ZIP	48674
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	OtherSolid
PRIMARY_FORM_ID	460109
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	460831
SITE_ADDRESS	2020 Dow Center
SITE_CITY	Midland
SITE_COUNTY	Midland
SITE_NAME	The Dow Chemical Company
SITE_STATE	MI
SITE_ZIP	48674
SUBMITTER_FIRST_NAME	Alicia
SUBMITTER_LAST_NAME	Fitzpatrick
SUBMITTER_TITLE	Mrs.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	CBI
PARENT_ADDRESS	CBI
PARENT_CITY	CBI
PARENT_COMPANY_NAME	CBI
PARENT_COUNTY	CBI
PARENT_STATE	CBI
PARENT_SUPPLEMENTAL_ADDRESS	CBI
PARENT_ZIP	CBI
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	567553
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	568588
SITE_ADDRESS	CBI
SITE_CITY	CBI
SITE_COUNTY	CBI
SITE_NAME	CBI
SITE_STATE	CBI
SITE_SUPPLEMENTAL_ADDRESS	CBI

SITE_ZIP	CBI
SUBMITTER_FIRST_NAME	CBI
SUBMITTER_LAST_NAME	CBI
SUBMITTER_MIDDLE_INITIAL	CBI
SUBMITTER_SUFFIX	CBI
SUBMITTER_TITLE	CBI
VOLUME_EXPORTED	0
VOLUME_USED	N/A

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	2
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Ink, Toner, and Colorant Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	4
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C

SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	Not Known or Reasonably Ascertainable
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	4
DOM_MFG_LB	CBI
MAX_CONCENTRATION	CBI
NUM_WORKERS	100 - 499
PARENT_ADDRESS	100 BAYER ROAD
PARENT_CITY	PITTSBURGH
PARENT_COMPANY_NAME	BAYER GROUP
PARENT_COUNTY	Allegheny
PARENT_STATE	PA
PARENT_ZIP	15205-9741
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	Liquid, PelletsLargeCrystals
PRIMARY_FORM_ID	658175
PRODUCT_CATEGORY	Food Packaging
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	658443
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	658443
SITE_ADDRESS	8500 WEST BAY ROAD MS01A
SITE_CITY	BAYTOWN
SITE_COUNTY	Harris
SITE_NAME	BAYER MATERIALSCIENCE BAYTOWN
SITE_STATE	TX
SITE_ZIP	77523-8727
SUBMITTER_FIRST_NAME	Timothy
SUBMITTER_LAST_NAME	Jones
SUBMITTER_MIDDLE_INITIAL	C
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	CBI
VOLUME_USED	CBI

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	45
DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Toys, Playground, and Sporting Equipment
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M

CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	10
DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Paints and Coatings
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	M
CHEMICAL_RECYCLED	NO
CHILDREN_PRODUCTS	No
CONS_COMM_OPTION	Commercial
C_MAX_CONCENTRATION	90% +
C_NUM_WORKERS	Not Known or Reasonably Ascertainable
C_PCT_PROD_VOLUME	45
DOM_MFG_LB	187836151
MAX_CONCENTRATION	90% +
NUM_WORKERS	100 - 499
PARENT_ADDRESS	1019 HAVERHIKK-OHIO FURNACE RD
PARENT_CITY	HAVERHILL
PARENT_COMPANY_NAME	HAVERHILL CHEMICALS LLC
PARENT_COUNTY	Scioto
PARENT_STATE	OH
PARENT_ZIP	45636
PAST_PROD_VOLUME	208667256
PHYSICAL_FORMS	DryPowder
PRIMARY_FORM_ID	720372
PRODUCT_CATEGORY	Electrical and Electronic Products
P_CDR_CONSUMER_USE_TABLE.CHEMICAL_REPORT_ID	720503
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	720503
SITE_ADDRESS	1019 Haverhill Ohio Furnace Road
SITE_CITY	Haverhill
SITE_COUNTY	Scioto
SITE_NAME	Haverhill Chemicals
SITE_STATE	OH
SITE_ZIP	45636
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Soucy
SUBMITTER_TITLE	Mr
VOLUME_EXPORTED	43815520
VOLUME_USED	0

Result Group

Component Name	Value
ACTIVITY	I
CHEMICAL_RECYCLED	NO
IMPORTED_LB	CBI
IMPORTED_NEVER_AT_SITE	YES
MAX_CONCENTRATION	90% +
NUM_WORKERS	< 10
PARENT_ADDRESS	460 PARK AVENUE
PARENT_CITY	NEW YORK

PARENT_COMPANY_NAME	ICC Industries Inc.
PARENT_COUNTY	NEW YORK
PARENT_STATE	NY
PARENT_ZIP	10022-1906
PAST_PROD_VOLUME	CBI
PHYSICAL_FORMS	PelletsLargeCrystals
PRIMARY_FORM_ID	748501
P_CDR_SUBMISSIONS.CHEMICAL_REPORT_ID	748822
SITE_ADDRESS	460 PARK AVENUE
SITE_CITY	NEW YORK
SITE_COUNTY	NEW YORK
SITE_NAME	ICC CHEMICAL CORPORATION
SITE_STATE	NY
SITE_ZIP	10022-1906
SUBMITTER_FIRST_NAME	Kevin
SUBMITTER_LAST_NAME	Scott
SUBMITTER_TITLE	Mr.
VOLUME_EXPORTED	0
VOLUME_USED	N/A

EC HSA Schedule 1 occupational exposure limit values (OELVs)

Result Group

Component Name	Value
EC Number	201-245-8
Notes for specific substances	IOELV
Occupational Exposure Limit Value (8-hour reference period)	10

EC HSA Schedule 2, Part II third list of indicative occupational exposure limit values (IOELVs)

Result Group

Component Name	Value
2010-OELV (8 Hour reference period except where STEL indicated)	No OELV
EC Number	201-245-8
Limits for Substances included in the 3rd list of IOELVs. (8-Hour reference period except where STEL indicated)	10mg/m3
Notes	IOELV

Trade Union Priority List for REACH Authorisation

Result Group

Component Name	Value
additional information on occupational disease	Substances or group of substances related with recognised occupational diseases.
Annex VI CLP number	604-030-00-0
Chemical or chemical group number	21
EC No	201-245-8
ED1	9
Occupational disease	Phenols or counterparts or halogenated derivatives thereof
PBT	9
R2	9
s	7
total	34
Uses	antioxidant, plasticizer, intermediate, flame retardant, pesticide, process regulator, paints, adhesive,softener, construction material, stabilizer, lubricant, additive, surface treatment, filler, anti-static agent, viscosity adjustor, insulating material, hydraulic fluid, corrosion inhibitor, hardener, joint-less floor, curing agent, casting material, brake grease, primer, stopping material, catalyst, paper additive

List of Chemical Agents and Occupational Limit Values (OELVs)

Result Group

Component Name	Value
8-hr TLVs	10
EINECS number	201-245-8
Notes	IOELV

KEMI Commodity Guide substance list

Result Group

Component Name	Value
Function	Antioxidant; Flame Retardants; Stabilizers, secondary

KEMI Hazardous Chemicals in Textiles

Result Group

Component Name	Value
Carcinogenic category 1A/1B	No
Environmentally hazardous, longterm effects Aquatic Chronic 1	No
Included in the REACH Candidate List	No
Mutagenic category 1A/1B	No
Respiratory sensitisation 1/1A/1B	No
Skin sensitisation 1/1A/1B	Yes
Toxic to reproduction category 1A/1B	No

Maine Department of Health List of Chemicals of High Concern (CHC)

Result Group

Component Name	Value
Health endpoint(s)	Development, Endocrine system
HPV (2006 and 3 of 4 years)	x
Source(s)	Maine (NTP CERHR; OSPAR Chemicals of Concern; EU Endocrine Disruptor); WA Appen1; WA CHCC
Use example(s) or class	Monomer in polycarbonate and epoxy resins, plastics mfg

Endocrine Active Chemicals and Other Contaminants of Emerging Concern in Minnesota's Groundwater, 2009-2010

Result Group

Component Name	Value
Chemical group	Hormones and other chemicals analyzed in water samples
Maximum concentration in groundwater measured in this study	4.41 g/L
Method reporting level	100 ng/L
Notes	(1) The Minnesota Department of Health is currently (2012) reevaluating this HBV.
Source or use	Plasticizer

Screening of plastic toys for chemical composition and hazards; Market surveillance in the Netherlands.

Result Group

Component Name	Value
Chemical group	Monomers / oligomers
material used in toy	PVC

New Zealand Inventory of Chemicals

Result Group

Component Name	Value
Approved Status	HSNO Approval: HSR003399

OSHA Chemical Sampling Information

Result Group

Component Name	Value
Chemical URLs	*External Link*

Total Use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Country	Denmark

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Consumer	No
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Sweden

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Norway

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Result Group

Component Name	Value
Country	Finland

Industrial use, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark

Use	Private households with employed persons

Result Group

Component Name	Value
Country	Denmark
Use	Not stated

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	L

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of food products and beverages

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark

Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Norway
Use	Other service activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Electricity gas steam and hot water supply

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Research and Development

Result Group

Component Name	Value
Country	Finland
Use	Health and social work

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway

Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Agriculture and Horticulture

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Public administration and defence

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden

Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Private households with employed persons

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway

Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Publishing printing and reproduction of recorded media

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of radio television and communication equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Denmark
Use	Construction

Result Group

Component Name	Value
Country	Denmark
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Denmark
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Finland
Use	Manucature of wood and products of wood and cork (excludes furniture)

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of furniture

Result Group

Component Name	Value
Country	Finland
Use	Construction

Result Group

Component Name	Value
Country	Finland
Use	Extra-territorial organizations and bodies

Result Group

Component Name	Value
Country	Norway

Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Construction

Result Group

Component Name	Value
Country	Norway
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of pulp paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi-trailers

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical machinery and apparatus

Result Group

Component Name	Value
Country	Sweden
Use	Retail trade excepting motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade and commission trade

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Sale maintenance and repair of motor vehicles and motorcycles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Construction

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plasstic products

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway

Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Mining support service activities

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Result Group

Component Name	Value
Country	Finland
Use	Not states

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of wood and products of wood and cork

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other non-metallic mineral products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Finland
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Finland
Use	Other manufacturing

Result Group

Component Name	Value
Country	Finland
Use	Construction of buildings

Result Group

Component Name	Value
Country	Finland
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Finland
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Finland
Use	Air transport

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Sweden

Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of paper and paper products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale trade excluding motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Sweden
Use	exept motor vehicles

Result Group

Component Name	Value
Country	Sweden
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Sweden
Use	Construction of buildings

Result Group

Component Name	Value
Country	Sweden
Use	Civil Engineering

Result Group

Component Name	Value
Country	Sweden
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Sweden
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Norway
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Norway
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Norway
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Extraction of crude petroleum and natural gas

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of chemicals and chemical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of rubber and plastic products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of basic metals

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of fabricated metal products except machinery

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of computer electronic and optical products

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of electrical equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of motor vehicles trailers and semi trailers

Result Group

Component Name	Value
Country	Denmark
Use	Manufacture of other transport equiptment

Result Group

Component Name	Value
Country	Denmark
Use	Repair and installation of machinery and equiptment

Result Group

Component Name	Value
Country	Denmark

Use	F00

Result Group

Component Name	Value
Country	Denmark
Use	Construction of buildings

Result Group

Component Name	Value
Country	Denmark
Use	Civil Engineering

Result Group

Component Name	Value
Country	Denmark
Use	Specialized construction activities

Result Group

Component Name	Value
Country	Denmark
Use	Wholesale retail trade and repair

Result Group

Component Name	Value
Country	Denmark
Use	Undifferentiated goods

Result Group

Component Name	Value
Country	Denmark
Use	Z09

Exposure, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Air	x = One or several uses indicate a potential exposure
Consumer	x = One or several uses indicate a potential exposure
Country	Norway
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	x = One or several uses indicate a potential exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xx: One or several uses indicate a probable exposure
Country	Sweden
Range_of_use	xx: One or several uses indicate a probable exposure
Surface_Water	xx: One or several uses indicate a probable exposure
Waste_Water	xx: One or several uses indicate a probable exposure

Result Group

Component Name	Value
Air	xx: One or several uses indicate a probable exposure
Consumer	xxx: One or several uses indicate a very probable exposure
Country	Denmark
Range_of_use	xxx: One or several uses indicate a very probable exposure
Surface_Water	xxx: One or several uses indicate a very probable exposure
Waste_Water	xxx: One or several uses indicate a very probable exposure

Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway

Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Surface active agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Fillers

Result Group

Component Name	Value
Country	Sweden
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden

Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Fillers

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark

Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Corrosion inhibitors

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Laboratory chemicals

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Cleaning/washing agents

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Softeners

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden

Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Stabilizers

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Insulating materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden

Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark

Use	Non-agricultural pesticides and preservatives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Reprographic agents

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland

Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Finland
Use	Construction materials

Result Group

Component Name	Value
Country	Finland
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Finland
Use	Fillers

Result Group

Component Name	Value
Country	Finland
Use	Insulating materials

Result Group

Component Name	Value
Country	Finland
Use	Intermediates

Result Group

Component Name	Value
Country	Finland
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Finland
Use	Process Regulators

Result Group

Component Name	Value
Country	Finland
Use	Stabilizers

Result Group

Component Name	Value
Country	Finland
Use	Viscosity adjustors

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Finland
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Finland
Use	anti-static agents

Result Group

Component Name	Value
Country	Finland
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Sweden
Use	Construction materials

Result Group

Component Name	Value
Country	Sweden

Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Sweden
Use	Process Regulators

Result Group

Component Name	Value
Country	Sweden
Use	Softeners

Result Group

Component Name	Value
Country	Sweden
Use	Stabilizers

Result Group

Component Name	Value
Country	Sweden
Use	Others

Result Group

Component Name	Value
Country	Sweden
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Sweden
Use	Surface treatment

Result Group

Component Name	Value
Country	Norway
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Norway
Use	Construction materials

Result Group

Component Name	Value
Country	Norway
Use	Process Regulators

Result Group

Component Name	Value
Country	Norway
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Adhesives and binding agents

Result Group

Component Name	Value
Country	Denmark
Use	Construction materials

Result Group

Component Name	Value
Country	Denmark
Use	Fillers

Result Group

Component Name	Value
Country	Denmark
Use	Hydraulic fluids and additives

Result Group

Component Name	Value
Country	Denmark
Use	Lubricants and Other Additives

Result Group

Component Name	Value
Country	Denmark
Use	Process Regulators

Result Group

Component Name	Value
Country	Denmark
Use	Paints lacquers and varnishes

Result Group

Component Name	Value
Country	Denmark
Use	Surface treatment

Detailed Use by Category, Substances in Preparations in Nordic Countries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Adhesive and Binding Materials

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Building Materials and Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Catalysts

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Cleaning and washing agents

Result Group

Component Name	Value
Country	FIN
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	FIN
DetailedUse	Paper and Paper Additives

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Protective Chemicals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Pharmaceuticals

Result Group

Component Name	Value
Country	FIN
DetailedUse	Plastic additives and auxiliaries

Result Group

Component Name	Value
Country	FIN
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN
DetailedUse	Other use

Result Group

Component Name	Value
Country	FIN

DetailedUse	Other use

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Binders (for paint adhesive etc)

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Paints and Varnishes

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Floor covering materials

Result Group

Component Name	Value
Country	S
DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Transmission mediums

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Paints

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners for Plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives glues

Result Group

Component Name	Value
Country	S
DetailedUse	Metal surface coating agents

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Plasticizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	S
DetailedUse	Intermediates (plastics manufacture)

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Biocides - pesticides for non agricultural uses

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N

DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents (see also Adhesives)

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents - for binding together the individual constit

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	S
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	N
DetailedUse	Binding agents for paints adhesives etc.

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Binding agents for moulding sand

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Other binding agents

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	S
DetailedUse	Softeners for plastic rubber paint and adhesive

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK

DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors) (see also Constructio

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	N
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	DK
DetailedUse	Flooring materials (joint-less floors)

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	S
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	N
DetailedUse	Joint-less floors

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hydraulic fluids

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK

DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesive hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for Paint- and lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Plastic hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Hardeners for filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	DK
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	S
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N
DetailedUse	Other hardeners

Result Group

Component Name	Value
Country	N

DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	N
DetailedUse	Catalysts (see also Accelerators; Process regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Construction materials (building materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Plastic construction materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives (see also Binding agents)

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Based on organic thinners Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives based on organic thinners

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Solvent-based adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives No thinner Industrial use

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Resins for 1- and 2-comp. hardening adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	DK
DetailedUse	Other adhesives

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N

DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	N
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives Hardener for adhesive Industrial use

Result Group

Component Name	Value
Country	S
DetailedUse	Adhesives hardener for industrial use

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	N
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Covering lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anti-fouling paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	DK
DetailedUse	Protection lacquers

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Volatile organic thinner Decorative/protec

Result Group

Component Name	Value
Country	DK
DetailedUse	Damp-proofing paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Floor paints (see also Flooring materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	DK
DetailedUse	Primer

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S

DetailedUse	Paint and varnish Hardeners to paint and varnish Active corr

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	N
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	S
DetailedUse	Paint and varnish Hardeners to paint and varnish Decorative/

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Anticorrosive paints

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Other paint lacquers and varnishes

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of metal (not paints etc.)

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	DK
DetailedUse	Metal surface treatment remedies

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment of metal

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface-active agents (detergents surfactants)

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment of paper and other non-metallic materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Surface treatment for paper cardboard and other non-metals

Result Group

Component Name	Value
Country	S
DetailedUse	Other surface treatment for paper cardboard and non-metals

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK

DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Process regulators (synthesis regulators)

Result Group

Component Name	Value
Country	DK
DetailedUse	Rust inhibitors

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	S
DetailedUse	Raw materials for production of plastics

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	DK
DetailedUse	Lubricants

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	S
DetailedUse	Brake grease

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers (See also Inhibitors)

Result Group

Component Name	Value
Country	N
DetailedUse	Stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	N
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	S
DetailedUse	Other stabilizers

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK

DetailedUse	Casting materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Moulding compounds

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Printing inks

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling materials (see also Fillers; Insulation materials)

Result Group

Component Name	Value
Country	N
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Filling agents

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Padding materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Stopping material

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

Result Group

Component Name	Value
Country	DK
DetailedUse	Other filling materials

Household Chemicals and Drugs Found in Biosolids (USGS)

Result Group

Component Name	Value
Chemical Class	fire retardant
Median concentration	4,690

USGS Lipophilic Organic Compounds (LOCs) for monitoring in Sediment in Cycle 3

Result Group

Component Name	Value
Aquatic-life bin	1
Chemical Detail	Phenol
Compound monitored in NAWQA Cycle 1?	No
NTAS Tier for sediment	1
Screening pathway	P4
Subgroup	F-9
Subgroup Name	Alkylphenols, alkylphenol ethoxylates, and other phenols

Pharmaceuticals and personal care products in Washington state wastewater treatment plants

Result Group

Component Name	Value
Chambers Creek	6850
Chemical Group	Semi-Volatile Organics
Classification	Plastic products, epoxy resin, flame retardant, fungicide
Lott	58700
Puyallup	32100

PPCPs in reclaimed water in Washington

Result Group

Component Name	Value
Chemical Group	PPCPs Analyzed by EPA Method 1694.List 3 - Acid Extraction in Negative Ionization
Fall reporting limit	783 - 1100
Spring Reporting limit	1420 - 2080