

SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

Bisphenol A - 157

Section 1. Product and company identification

GHS product identifier : Bisphenol A - 157
MSDS Number : U8926
Product type : Intermediate

Manufacturer/Supplier/Importer : Hexion Inc.
 180 East Broad Street
 Columbus, Ohio
 43215 USA

Contact person : 4information@hexion.com

Telephone : For additional health and safety or regulatory information, call
 1 888 443 9466.

Emergency telephone number : For Emergency Medical Assistance
 Call Health & Safety Information Services
 1-866-303-6949

For Emergency Transportation Information
 CHEMTREC US Domestic (800) 424-9300
 CHEMTREC International (703) 527-3887
 CANUTEC CA Domestic (613) 996-6666

Section 2. Hazards identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 SKIN SENSITIZATION - Category 1
 TOXIC TO REPRODUCTION - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
 [central nervous system (CNS)] - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) [bladder, kidneys, liver] - Category 2

GHS label elements

Hazard pictograms



Signal word

Hazard statements

: Danger
 : H318 Causes serious eye damage.
 : H317 May cause an allergic skin reaction.
 : H361f Suspected of damaging fertility.
 : H371 May cause damage to organs (central nervous system (CNS))

H373 May cause damage to organs through prolonged or repeated exposure (bladder, kidneys, liver)

Precautionary statements

- General** : Not applicable.
- Prevention** : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Wear protective gloves.
Wear eye or face protection.
Do not breathe dust.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
- Response** : Get medical attention if you feel unwell.
IF exposed or if you feel unwell:
Call a POISON CENTER or physician.
IF ON SKIN:
Wash with plenty of soap and water.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs:
Get medical attention.
IF IN EYES:
Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or physician.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : Unclassified Hazard - Combustible Dust

Combustible dust when finely divided and suspended in air.Fine dust clouds may form explosive mixtures with air.Product can explode if dust cloud is formed and ignited.

Minimize airborne dust. Eliminate all fire/ignition sources including static discharges near product/package. Prevent dust accumulation. Refer to Handling Section 7 of the MSDS for more information.

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

CAS number/other identifiers

CAS number : Not available
 EC number : Not available

Ingredient name	% by weight	CAS number
4,4'-Isopropylidenediphenol	90 - 100	80-05-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first aid personnel** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures**Extinguishing media**

- Suitable extinguishing media** : Use water spray or mist, dry chemical, foam or CO₂.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Combustible solid that burns. Fine dust clouds may form explosive mixtures with air.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). The ATEX Directive defines combustible powders as less than 500 microns in diameter. When processed with flammable liquids/vapors/mists, ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the MIE will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapor/dust mixture will be lower than the individual LELs for the vapors/mists or dusts. See NFPA 77 for additional guidance.

Section 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Minimize airborne dust and eliminate all fire/ignition

sources. Clean up spill as soon as possible using procedures described below. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Move containers from spill area. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Use spark-proof tools and explosion-proof equipment. Vacuums with explosion-proof motors should be used. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid creating dusty conditions and prevent wind dispersal. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Use spark-proof tools and explosion-proof equipment. Vacuums with explosion-proof motors should be used. Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

COMBUSTIBLE DUST HANDLING PROCEDURES:

Combustible dusts at sufficient concentrations can form explosive mixtures with air. High dust concentrations should be avoided. Follow US NFPA Standard 654, "Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids," UK HSE Guidance HSG 103, approved Codes of Practice (ACOPS) established for Explosive Atmospheres under the ATEX Directive 1999/92/EC for worker protection and ATEX Directive 94/9/EC that regulates equipment and protection systems used in potentially explosive atmospheres or other national guidance on safe handling of combustible dusts. Train workers in the recognition and prevention of hazards associated with combustible dust in the plant.

Minimize airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds. Use continuous suction at points of dust generation to capture and minimize the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimize the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in.(0.8 mm) thick can be sufficient to warrant immediate cleaning of the area.

Control sources of static electricity. This product or the package itself can accumulate static charges, and static discharge can be a source of ignition. Solids handling systems must be designed in accordance with applicable NFPA standards (including 654 and 77) and other national guidance. Do not empty directly into flammable solvents or in the presence of flammable vapors. The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges.

- Advice on general occupational hygiene** :
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** :
- Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep away from heat, hot surfaces, sparks and flame. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
4,4'-Isopropylidenediphenol	ACGIH TLV () Time Weighted Average (TWA) 5 mg/m ³ OSHA PEL () Time Weighted Average (TWA) 5 mg/m ³ Form: respirable particulate Time Weighted Average (TWA) 15 mg/m³ Form: total dust

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product., For PPE selection see National Fire Protection Association (NFPA) 2113, Standard on Selection, Care, Use and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Flakes.
- Color** : White
- Odor** : Slight phenolic
- Odor threshold** : Not available
- pH** : Not available
- Melting point/ Freezing point** : 153 - 156 °C (307.40 - 312.80 °F)
- Boiling point** : 220 °C (428.00 °F)
- Flash point** : Open cup: 207 °C (404.60 °F) (ASTM D 92)
- Burning time** : Not available
- Burning rate** : Not available
- Evaporation rate** : Not available
- Flammability (solid, gas)** : Not available
- Lower and upper explosive (flammable) limits** : **Lower:** Not defined for solids (See MEC)
Upper: Not defined for solids
- Vapor pressure** : 27 Pa @ 170 °C (338.00 °F)
- Vapor density** : Not available
- Relative density** : Not available
- Density** : 1,170 g/cm³
- Solubility** : Not available
- Solubility in water** : Slightly
- Partition coefficient: n-octanol/water** : Not available
- Auto-ignition temperature** : Not available
- Decomposition temperature** : Not available
- SADT** : Not available

Viscosity : **Dynamic:** Not available
Kinematic: Not available

Other information

*Minimum Ignition Energy (MIE) : < 4 mJ
*Minimum Ignition Temperature (MIT) : 480 °C
*Kst : 315 m.b_/s

Section 10. Stability and reactivity

Reactivity : Stable under normal conditions.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation. See Section 7 Handling.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
4,4'-Isopropylidenediphenol				
	LD50 Oral	Rat	3,250 mg/kg	-
	LD50 Dermal	Rabbit	3,000 mg/kg	-

Conclusion/Summary : Not available

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
4,4'-Isopropylidenediphenol	Skin - Erythema/E schar 404 Acute Dermal Irritation/Co	Rabbit	0	4 hrs	1 - 72 hrs

	rosion				
	Skin - Edema 404 Acute Dermal Irritation/Co rosion	Rabbit	0	4 hrs	1 - 72 hrs
	eyes - Cornea opacity 405 Acute Eye Irritation/Co rosion	Rabbit	1		-
	eyes - Iris lesion 405 Acute Eye Irritation/Co rosion	Rabbit	1		-
	eyes - Redness of the conjunctiva e 405 Acute Eye Irritation/Co rosion	Rabbit	1		-
	eyes - Edema of the conjunctiva e 405 Acute Eye Irritation/Co rosion	Rabbit	1 - 2		-

Conclusion/Summary

- Skin** : Not available
- eyes** : Not available
- Respiratory** : Not available

Sensitization

Conclusion/Summary

- Skin** : Not available
- Respiratory** : Not available

Mutagenicity

Conclusion/Summary

- : Not available

Carcinogenicity

Conclusion/Summary

- : Not available

Reproductive toxicity

Conclusion/Summary : See below for potential chronic health effects

Teratogenicity

Conclusion/Summary : Not available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
4,4'-Isopropylidenediphenol	Category 3 Category 2 Category 3 Category 2		Respiratory tract irritation central nervous system (CNS) Respiratory tract irritation central nervous system (CNS)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
4,4'-Isopropylidenediphenol	Category 2		bladder kidneys liver bladder kidneys liver

Aspiration hazard

Not available

Information on the likely routes of exposure : Not available

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available
 Potential delayed effects : Not available

Long term exposure

Potential immediate effects : Not available
 Potential delayed effects : Not available

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
4,4'-Isopropylidenediphenol	- -	-		-
Remarks:	<p>Bisphenol A (BPA) has been extensively tested in a wide variety of toxicological and biological tests, and has undergone many reviews internationally by a variety of governmental agencies. Many of these studies have focused on reproductive, developmental and endocrine endpoints. However, the human data is limited and insufficient to evaluate reproductive toxicity. While some studies show, or claim to show, target organ toxicity, fertility, or reproductive effects in humans; these studies lack internal and external validity as a result of flawed study design, multiple sources of bias, and lack of control for confounding factors.</p> <p>Numerous animal studies have been conducted and report a range of potential reproductive effects from BPA exposure. Although some studies report reproductive effects, many of these studies suffer from design flaws and reported observations have not been confirmed in larger, more robust studies. Comprehensive reviews of the scientific literature on BPA have focused on several well designed animal studies as a robust foundation for assessing BPA reproductive toxicity (e.g., NTP 1985; Ema et al. 2001; Tyl et al. 2002a, 2002b; Tyl et al. 2008; Delclos et al. 2014). In these studies, BPA was administered to rats and/or mice by the oral route of exposure including doses that far exceed those potentially experienced by humans, including workers. In these studies, either no reproductive toxicity was reported, or treatment-related reproductive effects were reported only at doses where maternal toxicity was observed. Maternal toxicity was manifest as liver toxicity, kidney toxicity, and overall depressions in body weight or body weight gains. The presence of these clear toxic effects was consistent with the role of stress and general systemic toxicity in the development of the reproductive effects at these high doses of BPA. The authors of these studies all concluded that systemic toxicity played a role in the observation of the reproductive effects.</p> <p>By letter dated April 6, 2015, the U.S. Food and Drug Administration (“FDA”) of the U.S. Department of Health & Human Services reported that FDA’s National Center of Toxicological Research (“NCTR”) “recently completed a large scale rodent toxicity study designed to characterize potential effects of BPA in a wide range of endpoints, including reproductive toxicity.... The results from the large extent of reproductive, sperm and hormone parameters evaluated in the NCTR study do not support BPA as a reproductive toxicant.”</p> <p>Based on the total weight of evidence of the experimental animal data, including the lack of robust epidemiological data for reproductive effects, well-established pharmacokinetic data and the results of FDA’s recent large scale toxicity study and using expert judgment, there is insufficient scientific support to associate reproductive toxicity with BPA exposure in the absence of systemic toxicity.</p>			

	Because experimental animal studies have indicated potential for reproductive effects in association with maternal toxicity at high doses, BPA has been classified as a Category 2 suspected human reproductive toxicant as required by OSHA.
--	---

Conclusion/Summary : Not available

General : May cause damage to organs through prolonged or repeated exposure
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	3,258.1 mg/kg
Route	ATE value
Dermal	3,007.5 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
bisphenol A			
	Acute LC50 4.6 mg/l Fresh water	Fish - Fathead minnow	96 h
	Acute NOEC 0.016 mg/l Fresh water Chronic ecotoxicity	Fish - Fathead minnow	444 d
	Acute EC50 1 - 16 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute NOEC 1.8 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 2.73 mg/l Fresh water	Aquatic plants - Microalgae	96 h
	Chronic NOEC 0.016 mg/l Fresh water	Fish - Fathead minnow	444 d
	Chronic NOEC 1.8 mg/l Fresh water	Aquatic invertebrates. Water flea	-

Conclusion/Summary : Not available

Persistence/degradability

Conclusion/Summary : Not available

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
4,4'-Isopropylidenediphenol	3.4	73	low

Bisphenol A - 157		-	low
-------------------	--	---	-----

Mobility in soil

- Soil/water partition coefficient (KOC)** : Not available
- Other adverse effects** : No known significant effects or critical hazards.

Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR		Non-regulated		
TDG		Non-regulated		
IMO/IMDG		Non-regulated		
IATA (Cargo)		Non-regulated		

*PG : Packing group

- Special precautions for user** : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.’

Section 15. Regulatory information

United States

- U.S. Federal regulations** : **United States - TSCA 12(b) - Chemical export notification:** None required.
United States - TSCA 5(a)2 - Final significant new use rules: Not listed
United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed
United States - TSCA 5(e) - Substances consent order: Not listed

SARA 313

		Product name	CAS number
Form R - Reporting requirements	:	Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7
Supplier notification	:	Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

- California Prop. 65:** : **WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Phenol, 4,4'-(1-methylethylidene)bis-	No.	Yes.	No.	No.

- United States inventory (TSCA 8b)** : All components are listed or exempted.

Canada

- WHMIS (Canada)** : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

- Canadian NPRI** : The following components are listed: Phenol, 4,4'-(1-methylethylidene)bis-
- CEPA Toxic substances** : The following components are listed: Phenol, 4,4'-(1-methylethylidene)bis-

International regulations

- International lists** : **Australia inventory (AICS):** All components are listed or exempted.
Canada inventory: All components are listed or exempted.
Japan inventory: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.
Taiwan inventory (CSNN): All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System III (U.S.A.) :

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

Full text of abbreviated H statements : Not applicable.

History

Date of printing : 07/14/2015
Date of issue/Date of revision : 05/28/2015
Date of previous issue : 10/20/2014
Version : 14.0
Prepared by : Product Safety Stewardship
Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 UN = United Nations

References : Not available

Notice to reader

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

® and (TM) Licensed trademarks of Hexion Inc.

