

SAFETY DATA SHEET

PRONTOFIX RESIN



Section 1. Identification

Product identifier : PRONTOFIX RESIN
Cat. No. : 40200109, 50209128
Container size : 1 l
Other means of identification : Not available.
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : For embedding and impregnation of materialographic specimens
Area of application : Professional applications.

Supplier's details : Struers Ltd
6200 Edwards Blvd.
Ontario
L5T 2V7 Mississauga
Canada

Telephone: +1 (905) 814 8855

e-mail address of person responsible for this SDS : sdsquestions@struers.dk

Emergency telephone number (with hours of operation) : Alberta & NWT:
Poison & Drug Information Service (PADIS): 1-800-332-1414
British Columbia:
Drug and Poison Information Centre (DPIC): 604-682-5050 / 1-800-567-8911
Ontario:
Poison Centre: 1-800-268-9017
Québec:
Poison Control Centre: 1-800-463-5060
Infotrac:
1-800-535-5053

Section 2. Hazard identification

Classification of the substance or mixture	: H315	SKIN IRRITATION - Category 2
	: H319	EYE IRRITATION - Category 2A
	: H317	SKIN SENSITIZATION - Category 1A
	: H360	TOXIC TO REPRODUCTION - Category 1B
	: H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms



Signal word : Danger

Date of issue/Date of revision	: 20/03/2026	Date of previous issue	: No previous validation	Version	: 1	1/17
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Section 2. Hazard identification

Hazard statements : H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H319 - Causes serious eye irritation.
 H335 - May cause respiratory irritation.
 H360 - May damage fertility or the unborn child.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
 P271 - Use only outdoors or in a well-ventilated area.
 P261 - Avoid breathing vapor.
 P264 - Wash thoroughly after handling.
 P272 - Contaminated work clothing should not be allowed out of the workplace.

Response : P308 + P313 - IF exposed or concerned: Get medical advice or attention.
 P304 + P340, P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
 P302 + P352 - IF ON SKIN: Wash with plenty of water.
 P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
 P362 + P364 - Take off contaminated clothing and wash it before reuse.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : P405 - Store locked up.
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

Ingredient name	Other names	% (w/w)	Identifiers
bis-[4-(2,3-epoxipropoxy)phenyl]propane oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	-	≥45 - ≤80	CAS: 1675-54-3
Bisphenol F diglycidyl ether, reaction mass of isomers	-	≥10 - ≤30	CAS: 68609-97-2
	-	≥10 - ≤30	-

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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** : 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. Get medical attention.
- Inhalation** : 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. Get medical attention. If necessary, call a poison center or physician. 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** : 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. 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. Get medical attention. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations



Section 4. First-aid measures

- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

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-aiders** : 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** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds

- 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.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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".

Section 6. Accidental release measures

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 materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). 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 breathing vapor or mist. 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. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.



Section 8. Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. 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.

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.

Recommended: Butyl rubber gloves.

The breakthrough time must be greater than the end use time of the product.

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.

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 : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Colorless.

Odor : Characteristic.

Odor threshold : Not available.



Section 9. Physical and chemical properties

Melting point and freezing point	: Not available.
Boiling point or initial boiling point and boiling range	: >200°C (>392°F)
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit or lower and upper flammability limit	: Not available.
Flash point	: Closed cup: >94°C (>201.2°F)
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: Not applicable.
Viscosity	: Dynamic (room temperature): 300 to 440 mPa·s (300 to 440 cP) Kinematic (room temperature): 275 to 403.7 mm ² /s (275 to 403.7 cSt) Kinematic (40°C (104°F)): Not available.

Solubility(ies)	:	Media	Result
		water	Not soluble

Miscible with water	: No.
Partition coefficient — n-octanol/water (logarithmic value)	: Not applicable.

Vapor pressure	:		Vapor Pressure at 20°C			Vapor pressure at 50°C		
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	0.00013	0.000017	OECD 104			

Density	: 1.09 g/cm ³
Relative density	: Not available.
Relative vapor density	: Not available.

Particle characteristics

Median particle size	: Not applicable.
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Other information

Physical/chemical properties comments	: No additional information.
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.



Section 10. Stability and reactivity

Conditions to avoid	: Sodium hydroxide can induce vigorous polymerisation at temperatures around 200 °C.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials and acids. Sodium hydroxide, Bases, water, amines, Ammonia. Alcohol.
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	
bis-[4-(2,3-epoxipropoxy)phenyl] propane	Rabbit - Dermal - LD50 20 g/kg	<u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Gross Metabolite Changes - Weight loss or decreased weight gain
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Rat - Oral - LD50 11400 mg/kg Rat - Oral - LD50 17100 mg/kg Rabbit - Dermal - LD50 >4000 mg/kg	
Bisphenol F diglycidyl ether, reaction mass of isomers	Rat - Male, Female - Oral - LD50 >2000 mg/kg Rabbit - Male, Female - Dermal - LD50 >2000 mg/kg	OECD 401 [Acute Oral Toxicity] OECD 402 [Acute Dermal Toxicity]

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name	Result	
bis-[4-(2,3-epoxipropoxy)phenyl] propane	Rabbit - Skin - Moderate irritant <u>Duration of treatment/exposure:</u> 24 hours Rabbit - Skin - Severe irritant <u>Duration of treatment/exposure:</u> 24 hours Rabbit - Skin - Erythema/Eschar <u>Irritation score:</u> 1.5 to 2 Rabbit - Skin - Edema <u>Irritation score:</u> 1 to 1.5	OECD 404 [Acute Dermal Irritation/Corrosion] OECD 404 [Acute Dermal Irritation/Corrosion]
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Rabbit - Skin - Moderate irritant <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 500 uL Rabbit - Skin - Primary dermal irritation index (PDII)	<u>Observation period:</u> 72 hours



Section 11. Toxicological information

Bisphenol F diglycidyl ether, reaction mass of isomers	<u>Duration of treatment/exposure:</u> 24 hours	
	<u>Irritation score:</u> 4.1	
	Rabbit - Skin - Primary dermal irritation index (PDII)	<u>Observation period:</u> 72 hours
	<u>Duration of treatment/exposure:</u> 24 hours	OECD 404 [Acute Dermal Irritation/Corrosion]
	<u>Irritation score:</u> 5.75	
	Rabbit - Skin - Erythema/Eschar	<u>Observation period:</u> 72 hours
	<u>Duration of treatment/exposure:</u> 4 hours	OECD 404 [Acute Dermal Irritation/Corrosion]
	<u>Irritation score:</u> 0.7	
	Rabbit - Skin - Edema	<u>Observation period:</u> 4 to 504 hours
	<u>Duration of treatment/exposure:</u> 4 hours	OECD 404 [Acute Dermal Irritation/Corrosion]
	<u>Irritation score:</u> 0	
	Rabbit - Skin - Mild irritant	
	<u>Duration of treatment/exposure:</u> 24 hours	

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result	
bis-[4-(2,3-epoxipropoxy)phenyl] propane	Rabbit - Eyes - Irritant	OECD 405 [Acute Eye Irritation/Corrosion]
	Rabbit - Eyes - Redness of the conjunctivae	
	<u>Irritation score:</u> 0.7	
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Rabbit - Eyes - Cornea opacity	<u>Observation period:</u> 1 to 24 hours
	<u>Irritation score:</u> 2	OECD 405 [Acute Eye Irritation/Corrosion]
Bisphenol F diglycidyl ether, reaction mass of isomers	Rabbit - Eyes - Cornea opacity	<u>Observation period:</u> 1 to 168 hours
	<u>Irritation score:</u> 0	OECD 405 [Acute Eye Irritation/Corrosion]
	Rabbit - Eyes - Iris lesion	<u>Observation period:</u> 1 to 168 hours
	<u>Irritation score:</u> 0	OECD 405 [Acute Eye Irritation/Corrosion]
	Rabbit - Eyes - Edema of the conjunctivae	<u>Observation period:</u> 1 to 168 hours
	<u>Irritation score:</u> 0	OECD 405 [Acute Eye Irritation/Corrosion]

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name	Result
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Section 11. Toxicological information

bis-[4-(2,3-epoxipropoxy)phenyl] propane	Guinea pig - skin <u>Result:</u> Sensitizing	OECD 406 [Skin Sensitization]
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Mouse - skin <u>Result:</u> Sensitizing	OECD 429 [Skin Sensitization: Local Lymph Node Assay]
Bisphenol F diglycidyl ether, reaction mass of isomers	Guinea pig - skin <u>Result:</u> Sensitizing	OECD 406 [Skin Sensitization]

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Product/ingredient name	Result	
bis-[4-(2,3-epoxipropoxy)phenyl] propane	Mammalian-Animal >3000 mg/kg [5 days] <u>Result:</u> Negative	
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	In vitro - Bacteria <u>Result:</u> Positive	OECD 471 [Bacterial Reverse Mutation Test]
	In vivo - Mammalian-Animal 4 g/kg <u>Result:</u> Negative	OECD 474 [Mammalian Erythrocyte Micronucleus Test]
	In vivo - Mammalian-Animal 700 mg/kg <u>Result:</u> Negative	OECD 475 [Mammalian Bone Marrow Chromosomal Aberration Test]
	In vitro - Mammalian-Animal <u>Result:</u> Negative	OECD 476 [In vitro Mammalian Cell Gene Mutation Test]
	In vitro - Mammalian-Animal <u>Result:</u> Negative	OECD 479 [Genetic Toxicology: In vitro Sister Chromatid Exchange Assay in Mammalian Cells]
Bisphenol F diglycidyl ether, reaction mass of isomers	In vitro - Bacteria <u>Result:</u> Positive	
	In vivo - Mammalian-Animal <u>Result:</u> Negative	

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Product/ingredient name	Result	
bis-[4-(2,3-epoxipropoxy)phenyl] propane	Rat - Oral - TC 100 mg/kg [24 hours] <u>Result:</u> Negative	OECD 453 [Combined Chronic Toxicity/Carcinogenicity Studies]
	Mouse - Male - Dermal - TC 100 mg/kg [24 hours] <u>Result:</u> Negative	OECD 453 [Combined Chronic Toxicity/Carcinogenicity Studies]
	Rat - Female - Dermal - TC 1000 mg/kg [24 hours] <u>Result:</u> Negative	OECD 453 [Combined Chronic Toxicity/Carcinogenicity Studies]

Section 11. Toxicological information

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
bis-[4-(2,3-epoxipropoxy)phenyl]propane	3	-	-

Reproductive toxicity

Product/ingredient name

bis-[4-(2,3-epoxipropoxy)phenyl]
propane
oxirane, mono[(C12-14-alkyloxy)
methyl] derivs.

Result

Rabbit - Oral

Developmental: Negative

Rat - Oral

10 mg/kg

Fertility effects: Positive

Rat - Dermal

>200 mg/kg - NOAEL

Maternal toxicity: Negative

Developmental: Negative

OECD 443 [Extended One-
Generation Reproductive Toxicity
Study]

OECD 414 [Prenatal Developmental
Toxicity Study]

Bisphenol F diglycidyl ether, reaction
mass of isomers

Rabbit - Dermal

300 mg/kg - NOAEL

Maternal toxicity: Negative

Developmental: Negative

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

bis-[4-(2,3-epoxipropoxy)phenyl]propane

oxirane, mono[(C12-14-alkyloxy)methyl]
derivs.

Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE
EXPOSURE) (Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE
EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact

: Causes serious eye irritation.

Inhalation

: May cause respiratory irritation.

Skin contact

: Causes skin irritation. May cause an allergic skin reaction.

Ingestion

: No known significant effects or critical hazards.



Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Chronic - Rat - Dermal - NOAEL 1 mg/kg [5 days per week] [90 days]	OECD 411 [Subchronic Dermal Toxicity: 90-day Study]

Conclusion/Summary [Product] : Not available.

General	: 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.
Reproductive toxicity	: May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates



Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
PRONTOFIX RESIN	12500	6250	N/A	N/A	N/A
bis-[4-(2,3-epoxipropoxy)phenyl]propane	11400	20000	N/A	N/A	N/A
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100	2500	N/A	N/A	N/A
Bisphenol F diglycidyl ether, reaction mass of isomers	2500	2500	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Acute - LC50 Fish 1.3 mg/l [96 hours]	OECD 203 [Fish, Acute Toxicity Test]
	Acute - EC50 Daphnia - <i>water Flea</i> 2.1 mg/l [48 hours]	OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - EC50 Algae >11 mg/l [72 hours]	
	Chronic - NOEC Daphnia - <i>water Flea</i> 0.3 mg/l [21 days]	OECD 211 [Daphnia Magna Reproduction Test]
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Acute - NOEC - Fresh water Fish - <i>Oncorhynchus mykiss</i> >100 mg/l [96 hours]	OECD 203 [Fish, Acute Toxicity Test]
	Acute - NOEC - Fresh water Algae - <i>Pseudokirchneriella subcapitata</i> 500 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Acute - LC50 Fish - <i>Rainbow trout</i> >1800 mg/l [96 hours]	203 [Fish, Acute Toxicity Test]
	Acute - LC50 Fish - <i>Bluegill</i> >5000 mg/l [96 hours]	OECD 203 [Fish, Acute Toxicity Test]
	Acute - EC50 Daphnia - <i>water Flea</i> 7.2 mg/l [48 hours]	OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - EC50 Algae 844 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	EC50 Micro-organism >100 mg/l [3 hours]	OECD 209 [Activated Sludge, Respiration Inhibition Test]
Bisphenol F diglycidyl ether, reaction mass of isomers	Acute - LC50 Fish	

Section 12. Ecological information

2.54 mg/l [96 hours]

Acute - EC50

Algae

>1000 mg/l [72 hours]

Acute - EC50

Daphnia

2.55 mg/l [48 hours]

OECD 201 [Alga, Growth Inhibition Test]

OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Product/ingredient name**Result**

bis-[4-(2,3-epoxipropoxy)phenyl]propane

6 to 12% [28 days] - Not readily

OECD 301F [Ready Biodegradability - Manometric Respirometry Test]

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Aerobic - 100 mg/l

OECD 301F [Ready Biodegradability - Manometric Respirometry Test]

Bisphenol F diglycidyl ether, reaction mass of isomers

87% [28 days] - Readily

10 mg/lOECD 301B [Ready Biodegradability - CO₂ Evolution Test]

16% [28 days] - Not readily

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
PRONTOFIX RESIN	-	-	Not readily
bis-[4-(2,3-epoxipropoxy)phenyl]propane	-	-	Not readily
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	-	-	Readily
Bisphenol F diglycidyl ether, reaction mass of isomers	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
bis-[4-(2,3-epoxipropoxy)phenyl]propane	2.64 to 3.78	3 to 31	Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	160 to 263	Low
Bisphenol F diglycidyl ether, reaction mass of isomers	3.3	150	Low

Mobility in soil

Soil/Water partition coefficient : 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

	TDG Classification	DOT Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Bisphenol F diglycidyl ether, reaction mass of isomers)	Environmentally hazardous substance, liquid, n.o.s. (bis-[4-(2,3-epoxipropoxy)phenyl]propane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Bisphenol F diglycidyl ether, reaction mass of isomers)	Environmentally hazardous substance, liquid, n.o.s. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Bisphenol F diglycidyl ether, reaction mass of isomers)
Transport hazard class(es)	9  	9  	9  	9  
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

Additional information

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

Explosive Limit and Limited Quantity Index 5

Special provisions 16, 99

DOT Classification

: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.

Limited quantity Yes.

Packaging instruction Exceptions: 155. Non-bulk: 203. Bulk: 241.

Special provisions 8, 146, 173, 335, 441, IB3, T4, TP1, TP29

Section 14. Transport information

IMDG	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <u>Emergency schedules</u> F-A, S-F <u>Special provisions</u> 274, 335, 375, 969
IATA	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. <u>Quantity limitation</u> Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964. <u>Special provisions</u> A97, A158, A197, A215

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

Canadian lists

Canadian NPRI	: None of the components are listed.
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

History

Date of issue/Date of revision	: 20/03/2026
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: Sphera Solutions



Section 16. Other information

Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor DOT = Department of Transportation GHS = Globally Harmonized System of Classification and Labelling of Chemicals HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods IMO = International Maritime Organization LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations
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Procedure used to derive the classification

Classification	Justification
SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method Calculation method Calculation method Calculation method Calculation method

References : HPR = Hazardous Products Regulations

▀ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

