



SAFETY DATA SHEET

5180 Epoxy Repair Mortar - base

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : 5180 Epoxy Repair Mortar - base
Product description : repair product
Product type : Solid.
UFI : QU2-Y0J3-T00K-4X1G
Product code : ROI0195

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

Identified uses	
Industrial use Professional use	
Uses advised against	Reason
Consumer	Product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

RUST-OLEUM EUROPE
Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium
Telephone no.: +32 (0) 13 460 200
Fax no.: +32 (0) 13 460 201

Tor Coatings Limited
Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom
Telephone no.: +44 (0) 191 4106611
Fax no.: +44 (0) 191 4920125
enquiries@tor-coatings.com

e-mail address of person responsible for this SDS : rpmeurohas@rustoleum.eu

1.4 Emergency telephone number

National advisory body/Poison Centre

Supplier

Telephone number United Kingdom: : +44 870 8200418 / +44 2038073798
Great Britain
Hours of operation : 24 / 7

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Skin Irrit. 2, H315
Skin Sens. 1, H317
Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
See Section 16 for the full text of the H statements declared above.

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention : P280 - Wear protective gloves.

Response : Not applicable.

Storage : Not applicable.

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

Hazardous ingredients : 2,2'-[[1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
benzyl alcohol

Supplemental label elements : EUH205 - Contains epoxy constituents. May produce an allergic reaction.

Supplemental label elements : Detergents - Regulation (EC) No 907/2006 : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : Not applicable

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

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
2,2'-[[1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	<5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	REACH #: 01-2119454392-40 EC: 500-006-8 CAS: 9003-36-5	≤3	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	<1	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Skin Sens. 1B, H317	[1]
See Section 16 for the full text of the H statements declared above.				

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures**4.1 Description of 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 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 adverse health effects persist or are severe. 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 if adverse health effects persist or are severe. 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.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. 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.

SECTION 4: First aid measures

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 halogenated compounds
 metal oxide/oxides

5.3 Advice for firefighters

- 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.
- Additional information** : No unusual hazard if involved in a fire.

SECTION 6: Accidental release measures

6.1 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 spilt material. 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".

SECTION 6: Accidental release measures

6.2 Environmental precautions : Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. 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.

7.2 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. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result	Value	Effects
<p>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane</p> <p>Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol</p>	DNEL - General population - Long term - Dermal	89,3 µg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Oral	0,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	0,75 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	0,87 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	4,93 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Dermal	83 mg/cm ²	<u>Effects:</u> Local
	DNEL - Workers - Long term - Dermal	104,15 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	29,39 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Dermal	62,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Inhalation	8,7 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Oral	6,25 mg/kg bw/day	<u>Effects:</u> Systemic
	DMEL - Workers - Short term - Dermal	8,3 µg/cm ²	<u>Effects:</u> Local
	DNEL - General population - Long term - Oral	6,25 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	8,7 mg/m ³	<u>Effects:</u> Systemic
DNEL - Workers - Long term - Inhalation	29,39 mg/m ³	<u>Effects:</u> Systemic	
DNEL - General population - Long term - Dermal	62,5 mg/kg bw/day	<u>Effects:</u> Systemic	
DNEL - Workers - Long term - Dermal	104,15 mg/kg bw/day	<u>Effects:</u> Systemic	

SECTION 8: Exposure controls/personal protection

benzyl alcohol	DNEL - Workers - Short term - Dermal	47 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Inhalation	450 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	9,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	90 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Short term - Dermal	28,5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Short term - Inhalation	40,55 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Short term - Oral	25 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Dermal	5,7 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Inhalation	8,11 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Consumers - Long term - Oral	5 mg/kg bw/day	<u>Effects:</u> Systemic
	DNEL - General population - Short term - Dermal	20 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Oral	4 mg/kg	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Dermal	8 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Short term - Oral	20 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal	4 mg/kg	<u>Effects:</u> Systemic
	DNEL - General population - Short term - Inhalation	27 mg/m ³	<u>Effects:</u> Systemic
	DNEL - General population - Long term - Inhalation	5,4 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation	22 mg/m ³	<u>Effects:</u> Systemic
	DNEL - Workers - Short term - Inhalation	110 mg/m ³	<u>Effects:</u> Systemic
DNEL - Workers - Short term - Dermal	40 mg/kg	<u>Effects:</u> Systemic	
	4 mg/kg bw/day	<u>Effects:</u>	

SECTION 8: Exposure controls/personal protection

	DNEL - General population - Long term - Oral		Systemic
	DNEL - General population - Long term - Dermal	4 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation	5,4 mg/m ³	Effects: Systemic
	DNEL - Workers - Long term - Dermal	8 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Oral	20 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Short term - Dermal	20 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Inhalation	22 mg/m ³	Effects: Systemic
	DNEL - General population - Short term - Inhalation	27 mg/m ³	Effects: Systemic
	DNEL - Workers - Short term - Dermal	40 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Short term - Inhalation	110 mg/m ³	Effects: Systemic

PNECs

Product/ingredient name	Result	Value	Remarks
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol benzyl alcohol	Fresh water	0,003 mg/l	-
	Marine water	0,0003 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0,294 mg/kg dwt	-
	Marine water sediment	0,0294 mg/kg dwt	-
	Soil	0,237 mg/kg dwt	-
	Fresh water - Assessment Factors	1 mg/l	-
	Marine - Assessment Factors	0,1 mg/l	-
	Fresh water sediment - Assessment Factors	5,27 mg/kg	-
	Marine water sediment - Assessment Factors	0,527 mg/kg	-
	Soil - Assessment Factors	0,456 mg/kg	-
	Sewage Treatment Plant - Assessment Factors	39 mg/l	-

SECTION 8: Exposure controls/personal protection

	Fresh water	2,3 mg/l	-
	Sewage Treatment Plant	39 mg/l	-
	Fresh water sediment	5,27 mg/kg	-
	Soil	0,456 mg/kg	-
	Marine water sediment	0,527 mg/kg	-
	Fresh water	1 mg/l	-
	Marine water	0,1 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

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

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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. > 8 hours (breakthrough time): nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

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. Recommended: Overalls buttoned to the neck and wrist. (EN 467)

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.

SECTION 8: Exposure controls/personal protection

- 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. Recommended: particulate filter (EN 143)
- 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.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

- Physical state** : Solid. [Granular solid.]
- Colour** : Brown. Yellow.
- Odour** : Mild. [Slight]
- Odour threshold** : Not available.
- Melting point/freezing point** : Not applicable.
- Initial boiling point and boiling range** : 205°C (401°F) [Literature benzyl alcohol]
- Flammability (solid, gas)** : Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
- Lower and upper explosion limit** : Lower: 1,3% [Calculated (Le Chatelier mixture rule)]
Upper: 13% [Calculated (Le Chatelier mixture rule)]
- Flash point** : Closed cup: >100°C (>212°F) [Literature benzyl alcohol]
- Auto-ignition temperature** : 430°C (>806°F) [Literature benzyl alcohol]
- Decomposition temperature** : Not applicable.
- pH** : Not applicable. [Literature]
- pH : Justification** : Product is non-polar/aprotic.
- Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.
- Solubility(ies)** :

Media	Result
cold water	Not soluble
hot water	Not soluble

- Solubility in water** : Not available.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Vapour pressure** : Not relevant due to nature of the product.
- Evaporation rate** : Not available.
- Relative density** : Not available.
- Density** : >2 g/cm³ [20°C (68°F)] [DIN 53217]
- Vapour density** : Not applicable.
- Explosive properties** : Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. No unusual hazard if involved in a fire.
- Oxidising properties** : Not available.
- Particle characteristics**
- Median particle size** : Not available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : No specific data.
- 10.5 Incompatible materials** : No specific data.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**Acute toxicity

Product/ingredient name	Result	Value
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit - Dermal - LD50	20 g/kg
benzyl alcohol	Rat - Oral - LD50	1660 mg/kg
	Rabbit - Dermal - LD50	2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	4,178 mg/l [4 hours]

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	N/A	20000	N/A	N/A	N/A
benzyl alcohol	1200	N/A	N/A	N/A	4,178

Skin corrosion/irritation

Product/ingredient name	Result	Exposure	Observation
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit - Skin - Mild irritant	<u>Amount/concentration applied:</u> 500 mg	-
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Rabbit - Skin - Mild irritant	<u>Amount/concentration applied:</u> 500 uL	-
	Rabbit - Skin - Erythema/Eschar	-	<u>Observation period:</u> 72 hours
benzyl alcohol	Pig - Skin - Moderate irritant	<u>Amount/concentration applied:</u> 100 %	-

SECTION 11: Toxicological information

Conclusion/Summary [Product] : Causes skin irritation.

Ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
benzyl alcohol

Conclusion/Summary

Causes skin irritation.

Slightly irritating to the skin.

Serious eye damage/eye irritation

Product/ingredient name	Result	Exposure	Observation
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit - Eyes - Severe irritant	Amount/concentration applied: 2 mg	-
benzyl alcohol	Rabbit - Eyes - Irritant	-	-

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
benzyl alcohol

Conclusion/Summary

Causes serious eye irritation.

Slightly irritating to the eyes.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Ingredient name

benzyl alcohol

Conclusion/Summary

May cause respiratory irritation.

Respiratory or skin sensitization

Product/ingredient name	Species - Route of exposure	Result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Mouse - skin	Result: Sensitising
	Guinea pig - skin	Result: Sensitising
	Guinea pig - skin	Result: Sensitising
	Guinea pig - skin	Result: Sensitising

Skin

Conclusion/Summary [Product] : May cause an allergic skin reaction.

Ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
benzyl alcohol

Conclusion/Summary

May cause an allergic skin reaction.

Non-sensitiser to skin.

Respiratory

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Conclusion/Summary

May cause sensitisation by inhalation.

SECTION 11: Toxicological information

Germ cell mutagenicity

Product/ingredient name	Species - Route of exposure	Result
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Bacteria	Result: Positive
	In vitro - Mammalian-Animal	Result: Positive
	In vitro - Mammalian-Animal	Result: Positive
	Mammalian-Animal	Result: Negative
	In vivo - Mammalian-Animal	Result: Negative
	In vitro - Mammalian-Animal	Result: Positive

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Carcinogenicity

Product/ingredient name	Species - Route of exposure	Result
Benzyl alcohol	Rat - Oral - TD	Result: Negative

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Ingredient name

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Conclusion/Summary

An allergen. Will cause dermatitis. Sensitive individuals may develop eczema and/or asthma on inhalation of this material. Laboratory experiments have shown mutagenic effects.

Reproductive toxicity

Product/ingredient name	Species - Route of exposure	Dose - Exposure	Effects
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Rat - Oral	540 mg/kg	-

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

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

Symptoms related to the physical, chemical and toxicological characteristics

SECTION 11: Toxicological information

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

Delayed and immediate effects as well as 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

Not available.

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

- 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** : No known significant effects or critical hazards.

Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Acute - EC50 2 mg/l [24 hours]	Daphnia spec.
	Acute - LC50 2 mg/l [96 hours]	Fish
	Acute - EC50 1,8 mg/l [72 hours]	Algae
	Acute - EC50 1,6 mg/l [48 hours]	Daphnia spec.
	Acute - IC50 >100 mg/l [3 hours]	Bacteria
	Acute - LC50 0,55 mg/l [96 hours]	Fish
	Chronic - NOEC 0,3 mg/l [21 days]	Daphnia spec.

SECTION 12: Ecological information

benzyl alcohol	Acute - EC50 770 mg/l [72 hours]	Algae
	Acute - LC50 646 mg/l [48 hours]	Fish
	Acute - LC50 - Fresh water 460 mg/l [96 hours]	Fish - Fathead minnow - Juvenile (Fledgling, Hatchling, Weanling)
	Acute - NOEC 310 mg/l [72 hours]	Algae
	Acute - LC50 - Fresh water 10 ppm [96 hours]	Fish - Bluegill

Conclusion/Summary [Product] : Harmful to aquatic life with long lasting effects.

Ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Conclusion/Summary

Toxic to aquatic life.

12.2 Persistence and degradability

Product/ingredient name	Test	Result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	-	6 to 12% [28 days] - Not readily
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	-	0% [28 days] - Not readily
	-	16% [28 days] - Not readily
benzyl alcohol	-	96% [21 days] - Readily

Conclusion/Summary [Product] : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Ingredient name

benzyl alcohol

Conclusion/Summary

Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	-	-	Not readily
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	-	-	Not readily
benzyl alcohol	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	3,242	3 to 31	Low
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	2,7	150	Low
benzyl alcohol	0,87	-	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not available.

Mobility : Non-volatile.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	No	N/A	No	No	No	N/A	No
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	N/A	No	No	No	N/A	No
benzyl alcohol	No	N/A	N/A	No	N/A	N/A	N/A

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised 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.

Hazardous waste : Yes.

Waste catalogue

Waste code	Waste designation
20 01 27*	paint, inks, adhesives and resins containing hazardous substances

Special precautions : 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

Additional information ADR

Additional information ADN

Additional information IMDG

Additional information IATA

14.6 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.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed above the relevant limit.

Substances of very high concern

None of the components are listed above the relevant limit.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Not applicable.

Total percentage of synthetic polymer microparticles : Not applicable.

SECTION 15: Regulatory information

Other EU regulations

VOC : Exempt

VOC for Ready-for-Use Mixture : Exempt

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

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.

CN code : 3214 10 10 00

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.

Japan inventory (ISHL): Not determined.

SECTION 15: Regulatory information

New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: <input checked="" type="checkbox"/> All components are listed or exempted.
United States	: Not determined.
Viet Nam	: Not determined.
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative
-----------------------------------	--

Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> Skin Irrit. 2, H315	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

<input checked="" type="checkbox"/> H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications

<input checked="" type="checkbox"/> Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B

Date of printing : 27/01/2026

Date of issue/ Date of revision : 27/01/2026

Date of previous issue : 31/05/2024

Version : 6

Notice to reader

SECTION 16: Other information

IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

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.