

# SAFETY DATA SHEET



Date of issue/Date of revision

: 20 March 2024

Version

: 1.02

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

### 1.1 Product identifier

**Product name** : SIGMASHIELD 1090 BASE RAL 7038  
**Product code** : 41090-R7038/11L  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

**Product use** : ☒ Professional applications, Used by spraying.  
**Use of the substance/mixture** : Coating.  
**Uses advised against** : Product is not intended, labelled or packaged for consumer use.

### 1.3 Details of the supplier of the safety data sheet

PPG France Business Support SAS, 3, ZAE "Les Dix Muids", B.P. 89, 59583 Marly Cedex, France, 33 (0)3 27 19 35 00

**e-mail address of person responsible for this SDS** : Product.Stewardship.EMEA@ppg.com

PPG Architectural Coatings UK Ltd, Huddersfield Road, Birstall, West Yorkshire WF17 9XA, Tel: +44 (0) 1924 354000

### 1.4 Emergency telephone number

#### Supplier

+33 (0)3 27 19 35 00 (0800-1700)

## 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  
Eye Irrit. 2, H319  
Skin Sens. 1, H317  
Muta. 2, H341  
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.

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

### 2.2 Label elements

#### **Hazard pictograms**




**Signal word** : Warning

**Hazard statements** : Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
Suspected of causing genetic defects.  
Harmful to aquatic life with long lasting effects.

#### Precautionary statements

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SECTION 2: Hazards identification


<b>Prevention</b>	: Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after handling.
<b>Response</b>	: Not applicable.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations. P202, P280, P273, P261, P264, P501
<b>Supplemental label elements</b>	:  Contains epoxy constituents. May produce an allergic reaction.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Not applicable.
<b>Special packaging requirements</b>	
<b>Containers to be fitted with child-resistant fastenings</b>	: Not applicable.
<b>Tactile warning of danger</b>	: Not applicable.

2.3 Other hazards

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
<b>Other hazards which do not result in classification</b>	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
 Bis-[4-(2,3-epoxipropoxy)phenyl] propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥10 - ≤21	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
2,3-epoxypropyl neodecanoate	REACH #: 01-2119431597-33 EC: 247-979-2 CAS: 26761-45-5	≥1.0 - ≤3.8	Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	≤0.30	Skin Sens. 1B, H317 Aquatic Chronic 3, H412  See Section 16 for the full text of the H statements declared above.	[1]

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**SECTION 3: Composition/information on ingredients**

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.

**SUB codes represent substances without registered CAS Numbers.**

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

<b>Eye contact</b>	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
<b>Inhalation</b>	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
<b>Skin contact</b>	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
<b>Ingestion</b>	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
<b>Protection of first-aiders</b>	: 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.

**4.2 Most important symptoms and effects, both acute and delayed**

Potential acute health effects

<b>Eye contact</b>	: Causes serious eye irritation.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: Causes skin irritation. May cause an allergic skin reaction.
<b>Ingestion</b>	: No known significant effects or critical hazards.

Over-exposure signs/symptoms

<b>Eye contact</b>	: Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: No specific data.
<b>Skin contact</b>	: Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	: No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**

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

**SECTION 5: Firefighting measures**


**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: None known.

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**SECTION 5: Firefighting measures**

**5.2 Special hazards arising from the substance or mixture**

<b>Hazards from the substance or mixture</b>	: In a fire or if heated, a pressure increase will occur and the container may burst. 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.
<b>Hazardous combustion products</b>	:  Decomposition products may include the following materials: carbon oxides metal oxide/oxides

**5.3 Advice for firefighters**

<b>Special protective actions for fire-fighters</b>	: 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.
<b>Special protective equipment for fire-fighters</b>	: 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**

**6.1 Personal precautions, protective equipment and emergency procedures**

<b>For non-emergency personnel</b>	: 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: 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".

**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**

<b>Small spill</b>	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Large spill</b>	: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**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.

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SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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. Avoid exposure - obtain special instructions before use. 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 vapour or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 between the following temperatures: 0 to 35°C (32 to 95°F). 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 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)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Occupational exposure limits

No exposure limit value known.

- Recommended monitoring procedures
- : 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.

DNELs/DMELs


Product/ingredient name	Type	Exposure	Value	Population	Effects
bis-[4-(2,3-epoxipropoxy)phenyl]propane	DNEL	Long term Inhalation	12.25 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	12.25 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	8.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	3.571 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	3.571 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.75 mg/kg bw/day	General	Systemic

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SECTION 8: Exposure controls/personal protection

2,3-epoxypropyl neodecanoate	DNEL	Short term Oral	0.75 mg/kg bw/day	population [Consumers] General population	Systemic
	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m³	Workers	Systemic
benzyl alcohol	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4 mg/m³	General population	Systemic
	DNEL	Long term Dermal	4.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.88 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	11.76 mg/m³	Workers	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m³	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	0.055 mg/m³	General population	Local
	DNEL	Long term Inhalation	0.308 mg/m³	Workers	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
 Dis-[4-(2,3-epoxipropoxy)phenyl]propane	Fresh water	0.006 mg/l	Assessment Factors
	Marine water	0.001 mg/l	Assessment Factors
	Fresh water sediment	0.996 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.1 mg/kg dwt	Equilibrium Partitioning
	Soil	0.196 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Secondary Poisoning	11 mg/kg	Assessment Factors

8.2 Exposure controls

- Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour 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.
- 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

: Chemical splash goggles.
- Skin protection
- Body protection

: butyl rubber  
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.



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SECTION 8: Exposure controls/personal protection

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	: 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. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3
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

Appearance

Physical state

Colour

Odour

Odour threshold

Melting point/freezing point

Initial boiling point and boiling range

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flash point

Auto-ignition temperature

: Liquid.

: Grey.

: Aromatic.

: Not available.

: May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxy)phenyl]propane. Weighted average: -3.9°C (25°F)

: >37.78°C (>100°F)

: liquid

: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

: Closed cup: Not applicable.

:

Ingredient name	°C	°F	Method
2,3-epoxypropyl neodecanoate	276	528.8	

pH	: Not applicable.				
	Not applicable. insoluble in water.				
Viscosity	: Kinematic (40°C): >21 mm²/s				
Solubility(ies)	:				
<table><tr><th>Media</th><th>Result</th></tr><tr><td>cold water</td><td>Not soluble</td></tr></table>		Media	Result	cold water	Not soluble
Media	Result				
cold water	Not soluble				

Miscible with water


: No.

Partition coefficient: n-octanol/ water

: Not applicable.

Vapour pressure

:

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
 3-epoxypropyl neodecanoate	0.11251	0.015				

Relative density	: 2.06
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SECTION 9: Physical and chemical properties

Vapour density	: Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxy)phenyl]propane). Weighted average: 10.87 (Air = 1)
Explosive properties	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties	: Product does not present an oxidizing hazard.
Particle characteristics	
Median particle size	: Not applicable.

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	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bis-[4-(2,3-epoxipropoxy)phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
	LD50 Dermal	Rat	3800 mg/kg	-
2,3-epoxypropyl neodecanoate	LD50 Oral	Rat	9.6 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	LC50 Inhalation Dusts and mists	Rat	5.05 mg/l	4 hours
	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary	: There are no data available on the mixture itself.
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Acute toxicity estimates



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SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMASHIELD 1090 BASE RAL 7038	67996.7	N/A	N/A	N/A	82.9
bis-[4-(2,3-epoxipropoxy)phenyl]propane	15000	23000	N/A	N/A	N/A
2,3-epoxypropyl neodecanoate	9600	3800	N/A	N/A	N/A
benzyl alcohol	1230	N/A	N/A	N/A	1.5
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	N/A	N/A	N/A	N/A	5.05

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Oedema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-

- Conclusion/Summary : Not available.
- Skin : There are no data available on the mixture itself.
- Eyes : There are no data available on the mixture itself.
- Respiratory : There are no data available on the mixture itself.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxy)phenyl]propane Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	skin	Mouse	Sensitising
	skin	Guinea pig	Sensitising

- Conclusion/Summary
- Skin : There are no data available on the mixture itself.
- Respiratory : There are no data available on the mixture itself.

Mutagenicity

- Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

- Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

- Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

- Conclusion/Summary : There are no data available on the mixture itself.

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 : Not available.

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SECTION 11: Toxicological information

Potential acute health effects

Eye contact	: Causes serious eye irritation.
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

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	: 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	: Suspected of causing genetic defects.
Reproductive toxicity	: No known significant effects or critical hazards.

Other information	: Not available.
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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Bis-[4-(2,3-epoxipropoxy)phenyl]propane  2,3-epoxypropyl neodecanoate  Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
	Acute EC50 3.5 mg/l	Algae	96 hours
	Acute EC50 4.8 mg/l Acute LC50 9.6 mg/l Acute EC50 >100 mg/l	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> Algae - <i>Pseudokirchneriella subcapitata</i>	48 hours 96 hours 72 hours
	Acute EC50 >10 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours

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SECTION 12: Ecological information

	Acute LC50 >10 mg/l	Fish - <i>Oncorhynchus mykiss</i>	96 hours
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Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	301D Ready Biodegradability - Closed Bottle Test	22 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Is-[4-(2,3-epoxipropoxy)phenyl]propane	-	-	Not readily
2,3-epoxypropyl neodecanoate	-	-	Not readily
benzyl alcohol	-	-	Readily
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2,3-epoxypropyl neodecanoate	4.4	-	High
benzyl alcohol	0.87	-	Low
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	>5.86	-	High

12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

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SECTION 13: Disposal considerations

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
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Type of packaging	Waste catalogue
Container	15 01 06 mixed packaging

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.
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SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	-	-
14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information	
ADR/RID	: None identified.
ADN	: The product is only regulated as a dangerous good when transported in tank vessels.
IMDG	: None identified.
IATA	: None identified.

14.6 Special precautions for user	: <b>Transport within user's premises:</b> 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.
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SECTION 14: Transport information

14.7 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.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

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

Seveso Directive

This product is not controlled under the Seveso Directive.

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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 2, H341	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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**SECTION 16: Other information**

Full text of classifications

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
Muta. 2	GERM CELL MUTAGENICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B

History

<b>Date of issue/ Date of revision</b>	<b>: 20 March 2024</b>
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<b>Version</b>	<b>: 1.02</b>

Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*