

# SAFETY DATA SHEET

Date of issue/Date of revision

: 28 February 2025

Version

: 1.03



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

### 1.1 Product identifier

**Product name** : SIGMAFAST 278 BASE RAL 9002

**Product code** : 000001204626

**Other means of identification**

00480870; 00481059

### 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 Coatings Belgium BV/SRL

Tweemontstraat 104

B-2100 Deurne

Belgium

Telephone +32-33606311

Fax +32-33606435

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

### 1.4 Emergency telephone number

**Supplier**

+31 20 4075210

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Flam. Liq. 3, H226

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Repr. 1B, H360F

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 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.

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 2: Hazards identification

### 2.2 Label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May damage fertility.  
Toxic to aquatic life with long lasting effects.

Prevention

: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

Response

: Collect spillage. IF exposed or concerned: Get medical advice or attention.

Storage

: Not applicable.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.  
P280, P210, P273, P391, P308 + P313, P501

Hazardous ingredients

: bis-[4-(2,3-epoxypropoxy)phenyl]propane; benzyl alcohol; Phenol, styrenated; oxirane, mono[(C12-14-alkyloxy)methyl] derivs. and Octadecanamide, N,N'-1,6-hexanediybis [12-hydroxy-

Supplemental label elements

: Contains epoxy constituents. May produce an allergic reaction.

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

: Restricted to professional users.

### 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.

Other hazards which do not result in classification

: None known.

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Type
1,4-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 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥5.0 - ≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
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 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
Phenol, styrenated	EC: 262-975-0 CAS: 61788-44-1	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	REACH #: 01-2119485289-22 EC: 271-846-8 CAS: 68609-97-2 Index: 603-103-00-4	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Repr. 1B, H360F	-	[1]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤1.0	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Octadecanamide, N, N'-1,6-hexanediylbis [12-hydroxy-	CAS: 55349-01-4	<1.0	Skin Sens. 1, H317 Aquatic Chronic 4, H413  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## 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

[2] Substance with a workplace exposure limit

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

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : 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.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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.

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

#### 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.

#### Over-exposure signs/symptoms

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

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 4: First aid measures

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

### 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 dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

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

**Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic 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 oxides  
halogenated compounds  
metal oxide/oxides

### 5.3 Advice for firefighters

**Special precautions 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**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 European standard EN 469 will provide a basic level of protection for chemical incidents.

## 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. 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".

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## 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. Collect spillage.

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

**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. 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. 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 vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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 a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. 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

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 7: Handling and storage

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

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).

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	<b>EU OEL (Europe, 1/2022) [xylene, mixed isomers]</b> Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m <sup>3</sup> . STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m <sup>3</sup> .
1-methoxy-2-propanol	<b>EU OEL (Europe, 1/2022)</b> Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m <sup>3</sup> . STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m <sup>3</sup> .

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard 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	Exposure	Value
[4-(2,3-epoxypropoxy)phenyl]propane	DNEL - Workers - Long term - Inhalation	<i>Effects: Systemic</i> 12.25 mg/m <sup>3</sup>
	DNEL - Workers - Short term - Inhalation	<i>Effects: Systemic</i> 12.25 mg/m <sup>3</sup>
	DNEL - Workers - Long term - Dermal	<i>Effects: Systemic</i> 8.33 mg/kg bw/day
	DNEL - Workers - Short term - Dermal	<i>Effects: Systemic</i> 8.33 mg/kg bw/day
	DNEL - General population - Consumers - Long term - Dermal	<i>Effects: Systemic</i> 3.571 mg/kg bw/day
	DNEL - General population - Consumers - Short term - Dermal	<i>Effects: Systemic</i> 3.571 mg/kg bw/day
	DNEL - General population - Consumers - Long term - Oral	<i>Effects: Systemic</i> 0.75 mg/kg bw/day
	DNEL - General population - Consumers - Short term - Oral	<i>Effects: Systemic</i> 0.75 mg/kg bw/day
	DNEL - General population - Long term - Dermal	<i>Effects: Systemic</i> 89.3 µg/kg bw/day
	DNEL - General population - Long term - Oral	<i>Effects: Systemic</i> 0.5 mg/kg bw/day

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 8: Exposure controls/personal protection

xylene	DNEL - Workers - Long term - Dermal	Effects: Systemic	0.75 mg/kg bw/day	
	DNEL - General population - Long term - Inhalation	Effects: Systemic	0.87 mg/m <sup>3</sup>	
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	4.93 mg/m <sup>3</sup>	
	DNEL - General population - Long term - Oral	Effects: Systemic	5 mg/kg bw/day	
	DNEL - General population - Long term - Inhalation	Effects: Local	65.3 mg/m <sup>3</sup>	
	DNEL - General population - Long term - Inhalation	Effects: Systemic	65.3 mg/m <sup>3</sup>	
	DNEL - General population - Long term - Dermal	Effects: Systemic	125 mg/kg bw/day	
	DNEL - Workers - Long term - Dermal	Effects: Systemic	212 mg/kg bw/day	
	DNEL - Workers - Long term - Inhalation	Effects: Local	221 mg/m <sup>3</sup>	
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	221 mg/m <sup>3</sup>	
benzyl alcohol	DNEL - General population - Short term - Inhalation	Effects: Local	260 mg/m <sup>3</sup>	
	DNEL - General population - Short term - Inhalation	Effects: Systemic	260 mg/m <sup>3</sup>	
	DNEL - Workers - Short term - Inhalation	Effects: Local	442 mg/m <sup>3</sup>	
	DNEL - Workers - Short term - Inhalation	Effects: Systemic	442 mg/m <sup>3</sup>	
	DNEL - General population - Long term - Oral	Effects: Systemic	4 mg/kg bw/day	
	DNEL - General population - Long term - Dermal	Effects: Systemic	4 mg/kg bw/day	
	DNEL - General population - Long term - Inhalation	Effects: Systemic	5.4 mg/m <sup>3</sup>	
	DNEL - Workers - Long term - Dermal	Effects: Systemic	8 mg/kg bw/day	
	DNEL - General population - Short term - Oral	Effects: Systemic	20 mg/kg bw/day	
	DNEL - General population - Short term - Dermal	Effects: Systemic	20 mg/kg bw/day	
Phenol, styrenated	DNEL - Workers - Long term - Inhalation	Effects: Systemic	22 mg/m <sup>3</sup>	
	DNEL - General population - Short term - Inhalation	Effects: Systemic	27 mg/m <sup>3</sup>	
	DNEL - Workers - Short term - Dermal	Effects: Systemic	40 mg/kg bw/day	
	DNEL - Workers - Short term - Inhalation	Effects: Systemic	110 mg/m <sup>3</sup>	
	DNEL - General population - Long term - Oral	Effects: Systemic	0.75 mg/kg bw/day	
	DNEL - General population - Long term - Dermal	Effects: Systemic	0.75 mg/kg bw/day	
	DNEL - General population - Long term - Inhalation	Effects: Systemic	1.31 mg/m <sup>3</sup>	
	DNEL - Workers - Long term - Dermal	Effects: Systemic	2.1 mg/kg bw/day	
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	7.4 mg/m <sup>3</sup>	
	1-methoxy-2-propanol	DNEL - General population - Long term - Oral	Effects: Systemic	33 mg/kg bw/day
DNEL - General population - Long term - Inhalation		Effects: Systemic	43.9 mg/m <sup>3</sup>	
DNEL - General population - Long term - Dermal		Effects: Systemic	78 mg/kg bw/day	
DNEL - Workers - Long term - Dermal		Effects: Systemic	183 mg/kg bw/day	
DNEL - Workers - Long term - Inhalation		Effects: Systemic	369 mg/m <sup>3</sup>	
DNEL - Workers - Short term - Inhalation		Effects: Local	553.5 mg/m <sup>3</sup>	
DNEL - Workers - Short term - Inhalation		Effects: Systemic	553.5 mg/m <sup>3</sup>	
DNEL - General population - Long term - Oral		Effects: Systemic	0.5 mg/kg bw/day	
oxirane, mono[ (C12-14-alkyloxy) methyl] derivs.		DNEL - General population - Long term - Dermal	Effects: Systemic	0.5 mg/kg bw/day
		DNEL - General population - Long term - Inhalation	Effects: Systemic	0.87 mg/m <sup>3</sup>
	DNEL - Workers - Long term - Dermal	Effects: Systemic	1 mg/kg bw/day	
	DNEL - Workers - Long term - Inhalation	Effects: Systemic	3.6 mg/m <sup>3</sup>	

### PNECs



Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail - Method	Value
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Fresh water - Assessment Factors	0.006 mg/l
	Marine water - Assessment Factors	0.001 mg/l
xylene	Fresh water sediment - Equilibrium Partitioning	0.996 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	0.1 mg/kg dwt
	Soil - Equilibrium Partitioning	0.196 mg/kg dwt
	Sewage Treatment Plant - Assessment Factors	10 mg/l
	Secondary Poisoning - Assessment Factors	11 mg/kg
	Fresh water	0.327 mg/l
	Marine water	0.327 mg/l
	Sewage Treatment Plant	6.58 mg/l
	Fresh water sediment	12.46 mg/kg dwt
	Marine water sediment	12.46 mg/kg dwt
1-methoxy-2-propanol	Soil	2.31 mg/kg
	Fresh water - Assessment Factors	10 mg/l
	Marine water - Assessment Factors	1 mg/l
	Sewage Treatment Plant - Assessment Factors	100 mg/l
	Fresh water sediment - Equilibrium Partitioning	41.6 mg/kg
	Marine water sediment - Equilibrium Partitioning	4.17 mg/kg
trizinc bis(orthophosphate)	Soil - Equilibrium Partitioning	2.47 mg/kg
	Fresh water - Sensitivity Distribution	20.6 µg/l
	Marine water - Sensitivity Distribution	6.1 µg/l
	Sewage Treatment Plant - Assessment Factors	100 µg/l
	Fresh water sediment - Sensitivity Distribution	117.8 mg/kg dwt
	Marine water sediment - Equilibrium Partitioning	56.5 mg/kg dwt
	Soil - Sensitivity Distribution	35.6 mg/kg dwt

### 8.2 Exposure controls

#### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### 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. Use eye protection according to EN 166.

##### 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. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 8: Exposure controls/personal protection

product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

- Gloves** : butyl rubber
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- 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** : Liquid.
- Colour** : Grey.
- Odour** : Aromatic. [Slight]
- Melting point/freezing point** : Not determined.
- Boiling point or initial boiling point and boiling range** : >37.78°C
- Flammability** : Not determined. There are no data available on the mixture itself.
- Lower and upper explosion limit** : Not available.
- Flash point** : Closed cup: 38°C
- Auto-ignition temperature** :

Ingredient name	°C	°F	Method
1-methoxy-2-propanol	270	518	

- Decomposition temperature** : Stable under recommended storage and handling conditions (see Section 7).
- pH** : Not applicable. insoluble in water.
- Viscosity** : Dynamic (room temperature): Not available.  
Kinematic (room temperature): >400 mm<sup>2</sup>/s  
Kinematic (40°C): >21 mm<sup>2</sup>/s
- Viscosity** : 60 - 100 s (ISO 6mm)
- Solubility** :

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 9: Physical and chemical properties

Media	Result
cold water	Not soluble

Partition coefficient n-octanol/ water (log Pow) : Not applicable.

Vapour pressure

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
1-methoxy-2-propanol	8.5	1.1				

Relative density : 1.75

### Particle characteristics

Median particle size : Not applicable.

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

**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.

No additional information.

## 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 halogenated compounds metal oxide/oxides

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May damage fertility.

### Acute toxicity

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 11: Toxicological information

Product/ingredient name	Result	Dose / Exposure
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Rabbit - Dermal - LD50	23000 mg/kg
	Rat - Oral - LD50	15000 mg/kg
xylene	Rat - Oral - LD50	4.3 g/kg
	Rabbit - Dermal - LD50	1.7 g/kg
benzyl alcohol	Rabbit - Dermal - LD50	>2000 mg/kg
	Rat - Oral - LD50	1200 mg/kg
Phenol, styrenated	Rat - Inhalation - LC50 Dusts and mists	>5 mg/l [4 hours]
	Rabbit - Dermal - LD50	>5010 mg/kg
1-methoxy-2-propanol	<u>Toxic effects:</u> Gastrointestinal - Gastritis Liver - Other changes Kidney, Ureter, and Bladder - Other changes	
	Rat - Oral - LD50	3550 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	<u>Toxic effects:</u> Behavioral - Food intake (animal) Gastrointestinal - Gastritis Liver - Other changes	
	Rabbit - Dermal - LD50	13 g/kg
trizinc bis(orthophosphate)	Rat - Oral - LD50	5.2 g/kg
	Rat - Inhalation - LC50 Vapour	>7000 ppm [6 hours]
	Rat - Oral - LD50	17100 mg/kg
	Rabbit - Dermal - LD50	>4000 mg/kg
	Rat - Oral - LD50	>5000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>5.7 mg/l [4 hours]

### Acute toxicity estimates

Route	ATE value
Oral	48241.21 mg/kg
Dermal	30680.57 mg/kg
Inhalation (vapours)	198.52 mg/l

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

### Irritation/Corrosion

Product/ingredient name	Result
bis-[4-(2,3-epoxipropoxy)phenyl]propane	<u>Rabbit - Eyes - Redness of the conjunctivae</u> Duration of treatment/exposure: 24 hours Irritation score: 0.4
-	<u>Rabbit - Eyes - Mild irritant</u> Duration of treatment/exposure: 24 hours Fully reversible in 7 days or less
-	<u>Rabbit - Skin - Erythema/Eschar</u> Duration of treatment/exposure: 4 hours Irritation score: 0.8
-	<u>Rabbit - Skin - Oedema</u> Duration of treatment/exposure: 4 hours Irritation score: 0.5
-	<u>Rabbit - Skin - Mild irritant</u> Duration of treatment/exposure: 4 hours
xylene	<u>Rabbit - Skin - Moderate irritant</u> Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 11: Toxicological information

### Conclusion/Summary

**Skin** : Causes skin irritation.

**Eyes** : Causes serious eye irritation.

**Respiratory** : Based on available data, the classification criteria are not met.

### Respiratory or skin sensitization

Product/ingredient name	Test	Result
Bis-[4-(2,3-epoxipropoxy)phenyl]propane	Mouse - skin	Result: Sensitising
Phenol, styrenated	Mouse - skin OECD 429	Result: Sensitising

### Conclusion/Summary

**Skin** : May cause an allergic skin reaction.

**Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

Based on available data, the classification criteria are not met.

### Carcinogenicity

Based on available data, the classification criteria are not met.

### Reproductive toxicity

May damage fertility.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects

### Conclusion/Summary

Based on available data, the classification criteria are not met.

### Specific target organ toxicity (repeated exposure)

Based on available data, the classification criteria are not met.

### Aspiration hazard

Product/ingredient name	Result
Xylene	ASPIRATION HAZARD - Category 1

### Conclusion/Summary

Based on available data, the classification criteria are not met.

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

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

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

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Eye contact** : Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 11: Toxicological information

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

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

### Potential chronic health effects

- 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.
- Other information** : Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 11.2.2 Other information

Not available.

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 12: Ecological information

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

### 12.1 Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Chronic - NOEC	Daphnia	0.3 mg/l [21 days]
	Acute - LC50 - Fresh water	Daphnia - <i>daphnia magna</i>	1.8 mg/l [48 hours]
	Acute - EC50	Daphnia	3.8 mg/l [48 hours]
	Acute - LC50 - Fresh water	Fish - Goldfish	>4500 mg/l [96 hours]
	Acute - LC50	Daphnia - Daphnia	23300 mg/l [48 hours]
1-methoxy-2-propanol	LC50	Fish	>1.8 mg/l [96 hours]
	EC50	Daphnia	7.2 mg/l [48 hours]
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	EC50	Algae	844 mg/l [72 hours]
	EC50	Fish	0.112 mg/l [96 hours]
trizinc bis(orthophosphate)	Acute - LC50	Fish	0.112 mg/l [96 hours]
	Chronic - NOEC	Fish	0.026 mg/l [30 days]

**Conclusion/Summary** : Toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose / Inoculum
Phenol, styrenated oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	OECD 301F	7% [28 days] - Not readily	
	OECD [ Ready Biodegradability - Manometric Respirometry Test]	87% [28 days] - Readily	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxy)phenyl]propane	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
Phenol, styrenated	-	-	Not readily
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
benzyl alcohol	0.87	-	Low
1-methoxy-2-propanol	<1	-	Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	160 to 263	Low

### 12.4 Mobility in soil

English (GB)

Europe

15/19

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 12: Ecological information

### Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
Bis-[4-(2,3-epoxypropoxy)phenyl]propane	4.02	10465.7
benzyl alcohol	1.1	12.6442
1-methoxy-2-propanol	1.02	10.447
Octadecanamide, N,N'-1,6-hexanediylbis [12-hydroxy-	4.31	20556.9

### 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 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 12.7 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

**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** :

#### European waste catalogue (EWC)

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	European waste catalogue (EWC)
Container	15 01 06 mixed packaging



Code : 000001204626 Date of issue/Date of revision : 28 February 2025  
SIGMAFAST 278 BASE RAL 9002

## SECTION 13: Disposal considerations

**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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(bis-[4-(2,3-epoxypropoxy)phenyl]propane)	Not applicable.

### Additional information

- ADR/RID** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, 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 according to 2.2.3.1.5.2.
- Tunnel code** : (D/E)
- ADN** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, 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 according to 2.2.3.1.5.2.
- IMDG** : This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, 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 according to 2.3.2.5.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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 applicable.

Code : 000001204626

Date of issue/Date of revision

: 28 February 2025

SIGMAFAST 278 BASE RAL 9002

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (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.

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

Product/ingredient name	Entry Number ( REACH )
SIGMAFAST 278 BASE RAL 9002	3
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	30
	30

**Labelling** : Restricted to professional users.

**Explosive precursors** : Not applicable.

##### Ozone depleting substances (EU 2024/590)

Not listed.

#### Seveso Directive

This product is controlled under the Seveso Directive.

##### Danger criteria

Category
<input checked="" type="checkbox"/> P5c
E2

**15.2 Chemical safety assessment** : No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

#### **Abbreviations and acronyms**

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

#### Full text of abbreviated H statements

**Code** : 000001204626 **Date of issue/Date of revision** : 28 February 2025  
**SIGMAFAST 278 BASE RAL 9002**

## SECTION 16: Other information

<p><input checked="" type="checkbox"/> H226  H302  H304  H312  H315  H317  H319  H332  H335  H336  H360F  H400  H410  H411  H412  H413</p>	<p>Flammable liquid and vapour.  Harmful if swallowed.  May be fatal if swallowed and enters airways.  Harmful in contact with skin.  Causes skin irritation.  May cause an allergic skin reaction.  Causes serious eye irritation.  Harmful if inhaled.  May cause respiratory irritation.  May cause drowsiness or dizziness.  May damage fertility.  Very toxic to aquatic life.  Very toxic to aquatic life with long lasting effects.  Toxic to aquatic life with long lasting effects.  Harmful to aquatic life with long lasting effects.  May cause long lasting harmful effects to aquatic life.</p>
--	---

### Full text of classifications [CLP/GHS]

<p><input checked="" type="checkbox"/> Acute Tox. 4  Aquatic Acute 1  Aquatic Chronic 1  Aquatic Chronic 2  Aquatic Chronic 3  Aquatic Chronic 4  Asp. Tox. 1  Eye Irrit. 2  Flam. Liq. 3  Repr. 1B  Skin Irrit. 2  Skin Sens. 1  Skin Sens. 1B  STOT SE 3</p>	<p>ACUTE TOXICITY - Category 4  SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1  LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1  LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2  LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3  LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4  ASPIRATION HAZARD - Category 1  SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  FLAMMABLE LIQUIDS - Category 3  REPRODUCTIVE TOXICITY - Category 1B  SKIN CORROSION/IRRITATION - Category 2  SKIN SENSITISATION - Category 1  SKIN SENSITISATION - Category 1B  SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3</p>
--	---

### History

**Date of issue/ Date of revision** : 28 February 2025  
**Date of previous issue** : 10 January 2025  
**Prepared by** : EHS  
**Version** : 1.03

### 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.*