# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

# SAFETY DATA SHEET

Date of issue/Date of revision

: 9 October 2024

Version : 1.06



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

1.1 Product identifier	
Product name	: SIGMACOVER 256/435/456/522 HARDENER
Product code	: 000001197842
Product type	: Liquid.
Other means of identification	<b>:</b> 00140801; 00141100; 00172626; 00190303; 00191381; 00202322; 00299656
1.2 Relevant identified us	es of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Hardener.
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 : Product.Stewardship.EMEA@ppg.com responsible for this SDS

#### 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 UK CLP/GHS Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336 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

: Danger

Code : 000001197842 SIGMACOVER 256/435/456/52		Date of issue/Date of revision         : 9 October 2024           HARDENER		
SECTION 2: Hazards	ic	lentification		
Hazard statements	:	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.		
Precautionary statements				
Prevention	:	Wear protective gloves. Wear 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	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact enses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.		
Storage	1	Not applicable.		
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P305 + P351 + P338, P310, P501		
Supplemental label elements	:	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 requirem	nen	t <u>s</u>		
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.		
Allie All				

# Other hazards which do<br/>not result in classification: Causes digestive tract burns. Prolonged or repeated contact may dry skin and<br/>cause irritation.

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

3.2 Mixtures :	Mixture			
Product/ingredient name	Identifiers	%	Classification	Туре
Ź-methylpropan-1-ol xylene	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1 REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥25 - ≤50 ≥10 - ≤25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
English (GB)	United I	Kingdom (UK)		2/1

Code : 000001197842 SIGMACOVER 256/435/456/522 H		issue/Date of revis	ion : 9 October 20	)24
SECTION 3: Composition	on/information on i	ngredients		
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	CAS: 68410-23-1	≥10 - <25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥1.0 - ≤3.5	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≤1.4	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412 See Section 16 for	[1]

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.

statements declared

above.

<u>Type</u>

[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 n	neasures			
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.			
Inhalation	<ul> <li>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.</li> </ul>			
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>			
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>			
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 damage.

English (GB)	United Kingdom (UK)	3/16
--------------	---------------------	------

Code : 00000119 SIGMACOVER 256/435/4	
SECTION 4: First	aid measures
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Over-exposure signs/sy	<u>mptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
4.3 Indication of any imm	nediate medical attention and special treatment needed
Notes to physician	<ul> <li>In case of inhalation of decomposition products in a fire, symptoms may be delayed The exposed person may need to be kept under medical surveillance for 48 hours.</li> </ul>
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 f	rom	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 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 oxides nitrogen 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

English (GB)

	LE: Eirofighting massures		
SIGMACOVE	R 256/435/456/522 HARDENER		
Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024

#### SECTION 5: Firefighting measures

equipment for fire-fighters b m c	Tre-fighters should wear appropriate protective equipment and self-contained reathing apparatus (SCBA) with a full face-piece operated in positive pressure node. Clothing for fire-fighters (including helmets, protective boots and gloves) onforming to British standard BS EN 469 will provide a basic level of protection for hemical incidents.
---	---

## **SECTION 6: Accidental release measures**

6 1	Personal	nrecautions	protective eq	uinment and	emergency	nrocedures
<b>U</b> . I	F EI SUIIAI	precautions,	protective eq	uipinent anu	entergency	procedures

on recounting, precountions, pre	rective 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. Do not breathe 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".
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	: 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 (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	: See Section 1 for emergency contact 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).

See Section 13 for additional waste treatment information.

See Section 8 for information on appropriate personal protective equipment.

#### 7.1 Precautions for safe handling

sections

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 breathe vapour or mist. Do not ingest. 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

Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024
SIGMACOVE	R 256/435/456/522 HARDENER		

#### SECTION 7: Handling and storage

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 burging measures.
	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 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**

Product/ingredient name	Exposure limit values
₽-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020)
	STEL 15 minutes: 231 mg/m <sup>3</sup> .
	STEL 15 minutes: 75 ppm.
	TWA 8 hours: 154 mg/m <sup>3</sup> .
	TWA 8 hours: 50 ppm.
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020) [xylene, o-,m-,p-
	or mixed isomers] Absorbed through skin.
	STEL 15 minutes: 441 mg/m <sup>3</sup> .
	TWA 8 hours: 50 ppm.
	TWA 8 hours: 220 mg/m <sup>3</sup> .
	STEL 15 minutes: 100 ppm.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed
	through skin.
	STEL 15 minutes: 552 mg/m <sup>3</sup> .
	STEL 15 minutes: 125 ppm.
	TWA 8 hours: 100 ppm.
	TWA 8 hours: 441 mg/m <sup>3</sup> .

#### **Biological exposure indices**

Product/ingredient name	Exposure indices
<b>x</b> ylene	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers] BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift.

Code<th::000001197842</th>Date of issue/Date of revision: 9 October 2024SIGMACOVER 256/435/456/522 HARDENER

# **SECTION 8: Exposure controls/personal protection**

Recommended monitoring	: Reference should be made to monitoring standards, such as the following: British
procedures	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	Туре	Exposure	Value	Population	Effects
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m <sup>3</sup>	General population	
	DNEL	Long term Inhalation	310 mg/m <sup>3</sup>	Workers	Local
xylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m³	General population	Local
	DNEL	Short term Inhalation	260 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	442 mg/m <sup>3</sup>	Workers	Systemic
Fatty acids, C18-unsatd., dimers, reaction products	DNEL	Long term Oral	0.56 mg/kg bw/day	General population	
with polyethylenepolyamines					
	DNEL	Long term Dermal	0.56 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.97 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.9 mg/m <sup>3</sup>	Workers	Systemic
ethylbenzene	DMEL	Long term Inhalation	442 mg/m <sup>3</sup>	Workers	Local
,	DMEL	Short term Inhalation	884 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	15 mg/m <sup>3</sup>	General population	
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m <sup>3</sup>	Workers	Local
2,4,6-tris	DNEL	Long term Oral	0.075 mg/kg bw/day	General population	Systemic
(dimethylaminomethyl)phenol		5		- 11	,
	DNEL	Short term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/kg bw/day	General population	
	DNEL	Short term Inhalation	0.13 mg/m <sup>3</sup>	General population	
	DNEL	Long term Inhalation	0.13 mg/m <sup>3</sup>	General population	
	DNEL	Long term Dermal	0.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m <sup>3</sup>	Workers	Systemic
3,6-diazaoctanethylenediamin		Long term Dermal	28 µg/cm²	Workers	Local
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	0.29 mg/m <sup>3</sup>	General population	
	DNEL	Long term Oral	0.41 mg/kg bw/day	General population	
	DNEL	Long term Dermal	$0.43 \text{ mg/cm}^2$	General population	
	DNEL	Long term Dermal	0.57 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	1 mg/cm <sup>2</sup>	General population	
	DNEL	Long term Inhalation	1 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	8 mg/kg bw/day	General population	•
	DNEL				
		Short term Oral	20 mg/kg bw/day	General population	
	DNEL	Short term Inhalation	1600 mg/m³ 5380 mg/m³	General population	
	DNEL	Short term Inhalation	5560 mg/m	Workers	Systemic

#### **PNECs**

Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024
SIGMACO	VER 256/435/456/522 HARDENER		

# SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
2-methylpropan-1-ol	Fresh water	0.4 mg/l	Assessment Factors
	Marine water	0.04 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.156 mg/kg dwt	-
	Soil	0.076 mg/kg dwt	Equilibrium Partitioning
xylene	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	-
	Soil	2.31 mg/kg	-
ethylbenzene	Fresh water	0.1 mg/l	Assessment Factors
	Marine water	0.01 mg/l	Assessment Factors
	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	Secondary Poisoning	20 mg/kg	-

	handling this product. When there is a risk of ignition from static electricity, wear ant static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Body protection	<ul> <li>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 product is the most appropriate and takes into account the particular conditions of us as included in the user's risk assessment.</li> <li>butyl rubber</li> <li>Personal protective equipment for the body should be selected based on the task bein performed and the risks involved and should be approved by a specialist before</li> </ul>
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should I worn at all times when handling chemical products if a risk assessment indicates this 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 differe glove manufacturers. In the case of mixtures, consisting of several substances, the
Eye/face protection Skin protection	: Chemical splash goggles and face shield.
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.
Individual protection meas	vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. ures
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 belo any recommended or statutory limits. The engineering controls also need to keep ga

Code : 000001197842 SIGMACOVER 256/435/456/522 HARDENER	Date of issue/Date of revision	: 9 October 2024
SECTION 8: Exposure controls/personal protection		

	e controls/personal protection
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 worker 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

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Clear.
Odour	: Amine-like.
Odour threshold	: Not available.
Melting point/freezing point	:
Initial boiling point and boiling range	: >37.78°C (>100°F)
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Not available.
Flash point	: Closed cup: 25°C (77°F)
Auto-ignition temperature	: 430°C (806°F)
рН	: Not applicable.
	Not applicable. insoluble in water.
Viscosity	<ul> <li>         Øynamic (room temperature): Not available. Kinematic (room temperature): &gt;400 mm²/s Kinematic (40°C): &gt;21 mm²/s      </li> </ul>
Solubility(ies)	:

#### Solubility(ies)

	Media	Result
	cold water	Not soluble
M	iscible with water : N	lo.

Partition coefficient: n-octanol/ : Not applicable. water

ŝ

#### Vapour pressure

	Va	Vapour Pressure at 20°C		V	Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
₽ methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2				
Relative density	: 0.95		<u>-</u>	•			
Explosive properties			self is not explosive, with air is possible.	but the forma	ition of an e	explosible mixture	
Dxidising properties	: Prod	uct does r	not present an oxidiz	ing hazard.			
Particle characteristics							

Code SIGMACOVE	: 000001197842 R 256/435/456/522 HARDENER	Date of issue/Date of revision	: 9 October 2024
SECTION	10: Stability and reactivity	1	

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredier	nts.
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 pro Refer to protective measures listed in sections 7 and 8.	oducts
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 nitrogen oxides	

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
2.1	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
5	LD50 Oral	Rat	4.3 g/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl)			0.0	
phenol				
	LD50 Oral	Rat	1200 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
· · · · ·	LD50 Oral	Rat	1716 mg/kg	-

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

#### 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)
GMACOVER 256/435/456/522 HARDENER	37508.2	6197.4	N/A	43.2	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
xylene	4300	1700	N/A	11	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	
<b>x</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-	
,	<ul> <li>Not available.</li> <li>There are no data available on the mixture itself.</li> </ul>					
Eyes	: There are no data available on the mixture itself.					

Code	: 000001197842	Date of issue/Date of revision
------	----------------	--------------------------------

: 9 October 2024

SIGMACOVER 256/435/456/522 HARDENER

Respiratory

# **SECTION 11: Toxicological information**

: There are no data available on the mixture itself.

Sensitisation						
Product/ingredient name	Route of exposure	Species	Result			
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines 3,6-diazaoctanethylenediamin	skin skin	Mouse Guinea pig	Sensitising Sensitising			
Conclusion/Summary			<u> </u>			
•	: There are no data available on the mixture itself.					
Respiratory	: There are no dat	ta available on the mixture itself				
<u>Mutagenicity</u>						
Conclusion/Summary <u>Carcinogenicity</u>	: There are no data available on the mixture itself.					
Conclusion/Summary	: There are no dat	ta available on the mixture itself				
Reproductive toxicity						
Conclusion/Summary <u>Teratogenicity</u>	: There are no da	ta available on the mixture itself				
<b>Conclusion/Summary</b>	: There are no dat	ta available on the mixture itself				
Specific target organ toxicity	(cingle expective)					

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
✓ -methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
xylene	Category 3	-	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### Aspiration hazard

Product/ingredient name	Result
₩ylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	:	Not available.
Potential acute health effects	2	
Eye contact	:	Causes serious eye damage.
Inhalation	:	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	:	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Symptoms related to the phy	si	cal, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain watering redness
English (GB)		United Kingdom (UK) 11/16

Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024
SIGMACOVE	ER 256/435/456/522 HARDENER		

# SECTION 11: Toxicological information

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Delayed and immediate e	ffects as well as chronic effects from short and long-term exposure
Short term exposure	
Potential immediate	Not available

Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
Conclusion/Summary	:	Not available.
General	:	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. 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	Exposure
₽-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	EC50 4.11 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2,4,6-tris (dimethylaminomethyl) phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
1	Acute LC50 >100 mg/l	Fish	96 hours
Conclusion/Summary	: Not available.		

Code : 000001197842

SIGMACOVER 256/435/456/522 HARDENER

Date of issue/Date of revision

: 9 October 2024

**SECTION 12: Ecological information** 

#### 12.2 Persistence and degradability

	· · · · · · · · · · · · · · · · · · ·			
Product/ingredient name	Test	Result	Dose	Inoculum
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	-	15 % - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-
2,4,6-tris	OECD 301D	4 % - Not readily - 28 days	-	-
(dimethylaminomethyl)	Ready			
phenol	Biodegradability -			
	Closed Bottle Test			
	1030			
Conclusion/Summary	: Not available.			
Product/ingredient name	Aquatic half-life	Photo	lvsis	Biodegradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>x</b> ylene	-	-	Readily
Fatty acids, C18-unsatd.,	-	-	Not readily
dimers, reaction products			
with polyethylenepolyamines			
ethylbenzene	-	-	Readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)			
phenol			

#### **12.3 Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
2-methylpropan-1-ol	1	-	Low
xylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)			
phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

#### 12.4 Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	
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** 

Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024
SIGMACOVE	R 256/435/456/522 HARDENER		

#### **SECTION 13: Disposal considerations**

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

#### 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	taken when Empty conta residues ma container. I thoroughly i	al and its container must be disposed of in a safe way. Care should be handling emptied containers that have not been cleaned or rinsed out. ainers or liners may retain some product residues. Vapour from product ay create a highly flammable or explosive atmosphere inside the Do not cut, weld or grind used containers unless they have been cleaned nternally. Avoid dispersal of spilt material and runoff and contact with rays, drains and sewers.

# **SECTION 14: Transport information**

	-				
	ADR/RID	ADN	IMDG	ΙΑΤΑ	
14.1 UN number	UN1263	UN1263	UN1263	UN1263	
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	
14.3 Transport hazard class(es)	3	3	3	3	
14.4 Packing group	III	111	111	111	
14.5 Environmental hazards	No.	Yes.	No.	No.	
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.	
Additional informa	tion			1	

# ADR/RID : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. Tunnel code : (D/E) ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

IATA : None identified.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

Code	: 000001197842	Date of issue/Date of revision	: 9 October 2024
SIGMACOVE	R 256/435/456/522 HARDENER		

### SECTION 14: Transport information

14.6	S	ре	C	a
user				

I precautions for : 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 Transport in bulk** : Not available. according to IMO

instruments

### **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.

**Explosive precursors** : Not applicable.

#### **Ozone depleting substances**

Not 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)
SIGMACOVER 256/435/456/522 HARDENER	3

Labelling

: Not applicable.

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### **Danger criteria**

Category

P5c

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	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

Code	:	000001197842	l	Date c
SIGMACOVE	R	256/435/456/522 HARDENER		

Date of issue/Date of revision

: 9 October 2024

# SECTION 16: Other information

Classification	Justification		
Flam. Liq. 3, H226	On basis of test data		
Skin Irrit. 2, H315	Calculation method		
Eye Dam. 1, H318	Calculation method		
Skin Sens. 1, H317	Calculation method		
STOT SE 3, H335	Calculation method		
STOT SE 3, H336	Calculation method		
Aquatic Chronic 3, H412	Calculation method		

#### Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### 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
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

#### <u>History</u>

Date of issue/ Date of revision	:	9 October 2024
Date of previous issue	1	28 August 2024
Prepared by	1	EHS
Version	1	1.06

#### <u>Disclaimer</u>

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.