SAFETY DATA SHEET

Date of issue/Date of revision

: 13 December 2024 Version



: 1.01

Europe

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

1.1 Product identifier	
Product name	: SIGMACOVER 456 BASE RAL 5015
Product code	: 000001174949
Other means of identification	L
00477104	

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 Aquatic Chronic 3, H412

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	: 000001174949	Date of issue/Date of revision	: 13 December 2024
SIGMACOVE	R 456 BASE RAL 5015		

SECTION 2: Hazards identification

ŝ

2.2 Label elements

Hazard pictograms



	▼ ▼
Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
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. Avoid breathing vapour.
Response	: Take off contaminated clothing and wash it before reuse.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
	P280, P210, P273, P261, P362 + P364, P501
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	: Not applicable.
Special packaging requiren	nents
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	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do : Prolonged or repeated contact may dry skin and cause irritation.

not result in classification

Code : 000001174949 SIGMACOVER 456 BASE RAL 5015 Date of issue/Date of revision

: 13 December 2024

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
₩ylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤18	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]
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6	≥5.0 - ≤10	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]
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	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≤1.0	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
1,3-bis[12-hydroxy- octadecamide-N- methylene]-benzene	REACH #: 01-2119962189-26 CAS: 911674-82-3 Index: 616-198-00-2	<1.0	Skin Sens. 1, H317 Aquatic Chronic 4, H413	-	[1] [2]
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	-	[1]
			the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[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.

Code	: 000001174949	Date of issue/Date of revision	: 13 December 2024
SIGMACC	OVER 456 BASE RAL 5015		

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. 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	<u>effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin
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	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
4.3 Indication of any in	nmediate medical attention and special treatment needed
	. In some of inhelation of decomposition products in a first symptome many

Notes to physician	: 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.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

reaction.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended	I by Commission Regulation (EU)
2020/878	

2020/070		
Code : 00000117494	49 Date of issue/Date of revision	: 13 December 2024
SIGMACOVER 456 BASE R	AL 5015	
SECTION 5: Firefigh	nting measures	
Hazards from the substance or mixture	: Flammable liquid and vapour. Runoff to sewer may cre a fire or if heated, a pressure increase will occur and the risk of a subsequent explosion. This material is harmfu effects. Fire water contaminated with this material mus from being discharged to any waterway, sewer or drain.	e container may burst, with the I to aquatic life with long lasting t be contained and prevented
Hazardous combustion	: Decomposition products may include the following mate	erials:

Hazardous combustion	1	Decomposition products may include the following materials:
products		carbon oxides
		nitrogen 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, pro	tective 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".
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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

Code : 0000011749	49 Date of issue/Date of revision	: 13 December 2024		
SIGMACOVER 456 BASE RAL 5015				

SECTION 6: Accidental release measures

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. 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. 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

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

Code : 000001174949 SIGMACOVER 456 BASE RAL 5015 Date of issue/Date of revision

: 13 December 2024

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values	
xylene	EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed	
	through skin.	
	TWĂ 8 hours: 50 ppm.	
	TWA 8 hours: 221 mg/m ³ .	
	STEL 15 minutes: 100 ppm.	
	STEL 15 minutes: 442 mg/m ³ .	
ethylbenzene	EU OEL (Europe, 1/2022) Absorbed through skin.	
	TWA 8 hours: 100 ppm.	
	TWA 8 hours: 442 mg/m ³ .	
	STEL 15 minutes: 200 ppm.	
	STEL 15 minutes: 884 mg/m ³ .	
2-methylpropan-1-ol	ACGIH TLV (United States, 7/2023)	
	TWA 8 hours: 50 ppm.	
	TWA 8 hours: 152 mg/m ³ .	
1,3-bis[12-hydroxy-octadecamide-N-methylene]-	ACGIH TLV (United States)	
benzene	TWA: 3 mg/m ³ (Respirable fraction).	
	TWA: 10 mg/m³ (Total dust).	

Recommended monitoring : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure procedures 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

Product/ingredient name	Туре	Exposure	Value	Population	Effects
x ylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
epoxy resin (MW ≤ 700)	DNEL	Long term Inhalation	12.25 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	12.25 mg/m ³	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	Systemic
				population	
				[Consumers]	
	DNEL	Short term Dermal	3.571 mg/kg bw/day	General	Systemic
				population	
				[Consumers]	
	DNEL	Long term Oral	0.75 mg/kg bw/day	General	Systemic
				population	
				[Consumers]	
	DNEL	Short term Oral	0.75 mg/kg bw/day	General	Systemic
English (GB)			Europe		7/18

Code : 000001174949 SIGMACOVER 456 BASE RAL 5015 Date of issue/Date of revision

: 13 December 2024

SECTION 8: Exposure controls/personal protection

				population [Consumers]	
ethylbenzene	DMEL	Long term Inhalation	442 mg/m³	Workers	Local
	DMEL	Short term Inhalation	884 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m ³	General population	Local
	DNEL	Long term Inhalation	310 mg/m ³	Workers	Local
Octadecanoic acid,	DNEL	Long term Inhalation	0.055 mg/m ³	General population	Local
12-hydroxy-, reaction		-	-		
products with					
ethylenediamine					
	DNEL	Long term Inhalation	0.308 mg/m³	Workers	Local

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
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	-
epoxy resin (MW ≤ 700)	-	Fresh water	0.006 mg/l	Assessment Factors
	-	Marine water	0.001 mg/l	Assessment Factors
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Fresh water sediment	0.996 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.1 mg/kg dwt	Equilibrium Partitioning
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	-
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

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

Conforms to Regulation (EC) No.	1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)
2020/878	

Code : 000001174949 SIGMACOVER 456 BASE RAL	Date of issue/Date of revision : 13 December 2024 5015
SECTION 8: Exposur	e controls/personal protection
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 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.

English (GB)	Europe	9/18
Melting point/freezing point	: Not determined.	
Odour	: Aromatic. [Slight]	
Colour	: Blue.	
Physical state	: Liquid.	
<u>Appearance</u>		
9.1 Information on basic physic	al and chemical properties	
The conditions of measurement of	f all properties are at standard temperature and pressure unless otherwis	e indicated.
SECTION 9: Physical a	and chemical properties	
controls	cases, fume scrubbers, filters or engineering modifications to the proc will be necessary to reduce emissions to acceptable levels.	

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 Code : 000001174949 Date of issue/Date of revision : 13 December 2024 SIGMACOVER 456 BASE RAL 5015 **SECTION 9: Physical and chemical properties Boiling point or initial boiling** : >37.78°C point and boiling range Not determined. There are no data available on the mixture itself. Flammability 5 Not available. Lower and upper explosion limit **Flash point** Closed cup: 27°C Auto-ignition temperature °C °F **Method** Ingredient name 356 672.8 EU A.16 29H,31H-phthalocyaninato(2-)-N29, N30,N31,N32 copper Stable under recommended storage and handling conditions (see Section 7). **Decomposition temperature** pH Not applicable. insoluble in water. ynamic (room temperature): Not available. Viscosity Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s : > 100 s (ISO 6mm) Viscosity Solubility t Media Result Not soluble cold water Partition coefficient n-octanol/ : Not applicable. water (log Pow) Vapour pressure t Vapour Pressure at 20°C Vapour pressure at 50°C mm Hg kPa Ingredient name Method mm kPa Method Hg 2-methylpropan-1-ol <12.00102 <1.6 DIN EN 13016-2 **Relative density** : 1.38 **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 : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions

Code	: 000001174949	Date of issue/Date of revision	: 13 December 2024
SIGMACOVE	R 456 BASE RAL 5015		

SECTION 10: Stability and reactivity

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 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.

Zauses serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Acute toxicity

Result	Species	Dose	Exposure
LD50 Dermal	Rabbit	1.7 g/kg	-
LD50 Oral	Rat	4.3 g/kg	-
LD50 Dermal	Rabbit	>2 g/kg	-
LD50 Oral	Rat	>2 g/kg	-
LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
LD50 Dermal	Rabbit	17.8 g/kg	-
LD50 Oral	Rat	3.5 g/kg	-
LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
LD50 Dermal	Rabbit	2460 mg/kg	-
LD50 Oral	Rat	2830 mg/kg	-
LC50 Inhalation Dusts and	Rat	>5.08 mg/l	4 hours
mists		, C	
LC50 Inhalation Dusts and	Rat	5.05 mg/l	4 hours
mists		Ĭ	
LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal LD50 Oral LD50 Oral LD50 Oral LC50 Inhalation Vapour LD50 Dermal LD50 Oral LC50 Inhalation Vapour LD50 Dermal LD50 Oral LC50 Inhalation Dusts and mists LC50 Inhalation Dusts and mists	LD50 DermalRabbitLD50 OralRatLD50 OralRatLD50 DermalRatbitLD50 OralRatLC50 Inhalation VapourRatLD50 DermalRatbitLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLC50 Inhalation Dusts andRatmistsLC50 Inhalation Dusts andLC50 Inhalation Dusts andRat	LD50 DermalRabbit1.7 g/kgLD50 OralRat4.3 g/kgLD50 DermalRat>2 g/kgLD50 OralRat>2 g/kgLD50 OralRat>2 g/kgLC50 Inhalation VapourRat17.8 mg/lLD50 DermalRat3.5 g/kgLD50 OralRat3.5 g/kgLD50 OralRat24.6 mg/lLD50 DermalRat2460 mg/kgLD50 DermalRat2830 mg/kgLD50 OralRat>5.08 mg/lLD50 OralRat>5.05 mg/l

Acute toxicity estimates

Route	ATE value	
Øermal	9376.36 mg/kg	
Inhalation (vapours)	54.67 mg/l	

Conclusion/Summary : 🖪

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene epoxy resin (MW ≤ 700)	Skin - Moderate irritant Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit Rabbit	- - -	24 hours 500 mg - -	

Conclusion/Summary

Skin

: Causes skin irritation.

Eyes

Respiratory

- : Zauses serious eye irritation.
- : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Code : 000001174949 Date of issue/Date of revision : 13 December 2024 SIGMACOVER 456 BASE RAL 5015

SECTION 11: Toxicological information

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW ≤ 700) Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	skin skin	Mouse Guinea pig	Sensitising Sensitising

Conclusion/Summary

- Skin
- Respiratory

: May cause an allergic skin reaction.

: 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

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene 2-methylpropan-1-ol	Category 3 Category 3 Category 3	-	Respiratory tract irritation Respiratory tract irritation Narcotic effects

Conclusion/Summary

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

Specific target organ toxicity (repeated exposure)

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

Conclusion/Summary

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

Aspiration hazard

Product/ingredient name	Result		
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		

Conclusion/Summary

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

Information on likely

: Not available.

routes of exposure Potential acute health effects Inhalation : No known significant effects or critical hazards. : No known significant effects or critical hazards. Ingestion Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Eye contact : Causes serious eye irritation. Symptoms related to the physical, chemical and toxicological characteristics Inhalation : No specific data. Ingestion : No specific data. English (GB) 12/18 Europe

Code : 00000117494	19	Date of issue/Date of revision	: 13 December 2024
SIGMACOVER 456 BASE R	AL 5015		
SECTION 11: Toxic	ological inform	nation	
Skin contact	: Adverse sympt irritation redness dryness cracking	toms may include the following:	
Eye contact	: Adverse sympt pain or irritation watering redness	toms may include the following: n	
Delayed and immediate ef	<u>fects as well as chr</u>	ronic effects from short and long-term	exposure
Short term exposure			
Potential immediate effects	-	ificant effects or critical hazards.	
Potential delayed effect	s : No known sign	ificant effects or critical hazards.	
Long term exposure			
Potential immediate effects	: No known sign	ificant effects or critical hazards.	
Potential delayed effect	<mark>s</mark> : No known sign	ificant effects or critical hazards.	
Potential chronic health e	fects		
General		epeated contact can defat the skin and le ice sensitized, a severe allergic reaction ry low levels.	
Carcinogenicity	: No known sign	ificant effects or critical hazards.	
Mutagenicity	: No known sign	ificant effects or critical hazards.	
Reproductive toxicity	: No known sign	ificant effects or critical hazards.	
Other information	dusts may be h cause irritation damage. Inhala exposure limits	epeated contact may dry skin and cause narmful if inhaled. Repeated exposure to of the respiratory system and permaner ation of vapour/aerosol concentrations al s causes headaches, drowsiness and na ess or death. Avoid contact with skin and	high vapor concentrations may It brain and nervous system bove the recommended usea and may lead to

11.2.1 Endocrine disrupting properties

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

11.2.2 Other information

Not available.

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

Code : 000001174949 SIGMACOVER 456 BASE RAL 5015 Date of issue/Date of revision

: 13 December 2024

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
<mark>e</mark> poxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
1,3-bis[12-hydroxy-octadecamide-N-methylene]- benzene	Acute LC50 >100 mg/l	Fish	96 hours
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 >10 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >10 mg/l	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary

: Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Poxy resin (MW ≤ 700) ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	-	5 % - 28 days 79 % - Readily - 10 days 22 % - 28 days	5	-	-
Product/ingredient name		Aquatic half-life	Photo	lysis	Biodegradability
xylene epoxy resin (MW ≤ 700) ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine		- - - -	- - -		Readily Not readily Readily Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
✓Jene epoxy resin (MW ≤ 700) ethylbenzene 2-methylpropan-1-ol Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	3.12 3 3.6 1 >5.86	7.4 to 18.5 31 79.43 - -	Low Low Low Low High

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

English (GB)	Europe	14/18
--------------	--------	-------

Code : 000001174949	Date of issue/Date of revision	: 13 December 2024
SIGMACOVER 456 BASE RAL 5015		

SECTION 12: Ecological information

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

12.6 Endocrine disrupting properties

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

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.
Hozardovo wosto	

Hazardous waste

European waste catalogue (EWC)

Waste code Waste designation	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
Deekening	

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
Special precautions	taken when h Empty contai residues may Do not cut, w	I and its container must be disposed of in a safe way. Care should be nandling emptied containers that have not been cleaned or rinsed out. iners or liners may retain some product residues. Vapour from product y create a highly flammable or explosive atmosphere inside the container. yeld or grind used containers unless they have been cleaned thoroughly youd dispersal of spilt material and runoff and contact with soil, waterways, ewers.

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
English (GB)		Euro	ope	15/18

Code<th:: 000001174949</th>Date of issue/Date of revision: 13 December 2024SIGMACOVER 456 BASE RAL 5015

SECTION 14: Transport information

SECTION 14: Transport Information				
14.4 Packing group	III	III		
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

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.
ΙΑΤΑ	: None identified.
14.6 Special pre	cautions 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

14.7 Maritime transport in : Not applicable.

bulk according to IMO

instruments

user

SECTION 15: Regulatory information

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

the event of an accident or spillage.

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)	
GMACOVER 456 BASE RAL 5015	3	

Labelling

: Not applicable.

Explosive precursors : Not applicable. <u>Ozone depleting substances (1005/2009/EU)</u> Not listed.

Seveso Directive

This product is controlled under the Seveso Directive. Danger criteria

Code<th:: 000001174949</th>Date of issue/Date of revision: 13 December 2024SIGMACOVER 456 BASE RAL 5015

SECTION 15: Regulatory information

Category

P5c

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
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.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]

English (GB)	Europe	17/18	
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEA Category 2	TED EXPOSURE -	
Skin Sens. 1B	SKIN SENSITISATION - Category 1B		
Skin Sens. 1	SKIN SENSITISATION - Category 1		
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2		
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3		
Flam. Liq. 2		FLAMMABLE LIQUIDS - Category 2	
Eye Irrit. 2		SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Eye Dam. 1		SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
Asp. Tox. 1		ASPIRATION HAZARD - Category 1	
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - C		
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - C		
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - C	Category 2	
Acute Tox. 4	ACUTE TOXICITY - Category 4		

Code : 000001174949 SIGMACOVER 456 BASE RAL 5015	Date of issue/Date of revision : 13 December 2024
SECTION 16: Other information	
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
History	

<u>Instory</u>	
Date of issue/ Date of revision	: 13 December 2024
Date of previous issue	: 4 April 2024
Prepared by	: EHS
Version	: 1.01

<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.