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

: 13 December 2024 Version



: 1.05

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

1.1 Product identifier		
Product name	1	SIGMACOVER 456 BASE (LEAD FREE COLOURS)
Product code	1	00314716
Product type	1	Liquid.
Other means of identification	:	Not available.
1.2 Relevant identified uses	of	the substance or mixture and uses advised against
Product use	:	Professional applications, Used by spraying.
Use of the substance/ mixture	:	Coating.
Uses advised against	:	Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG 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 Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Hazard pictograms



Signal word

: Warning

Code	: 00314716	Date of issue/Date of revision	: 13 December 2024
SIGMACOVE	ER 456 BASE (LEAD FREE COLOURS)		

SECTION 2: Hazards identification

OEOHON 2. Huzulus		
Hazard statements	-	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. 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. Avoid breathing vapour. Wash thoroughly after handling.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P261, P264, 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 requirem	en	<u>ts</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.
Other hazards which do not result in classification	:	Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Туре
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤25	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	[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	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373	[1] [2]
English (GB)	United H	(ingdom (UK)		2/1

<mark>Code</mark>	: 00314716	Date of issue/Date of revision	: 13 December 2024
SIGMACC	VER 456 BASE (LEAD FREE COLOU	RS)	
SECTION 3: Composition/information on ingredients			

	-			
	CAS: 100-41-4 Index: 601-023-00-4		(hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥1.0 - <3.0	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]
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	[1]
			See Section 16 for the full text of the H statements declared above.	

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

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene. 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	1	Causes serious eye irritation.
Inhalation	3	May cause respiratory irritation.
Skin contact	1	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	1	No known significant effects or critical hazards.

English (GB)

Code	: 00314716	Date of issue/Date of revision	: 13 December 2024
SIGMACOVE	R 456 BASE (LEAD FREE COLOURS)		

SECTION 4: First aid measures

Over-exposure signs	:/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

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

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 sulfur oxides halogenated compounds metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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 British standard BS EN 469 will provide a basic level of protection for chemical incidents.

- Code : 00314716
- SIGMACOVER 456 BASE (LEAD FREE COLOURS)
- Date of issue/Date of revision
- : 13 December 2024

, , ,

SECTION 6: Accidental release measures

6.1 Personal precautions, prot	ective 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 o	ontainment 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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
6.4 Reference to other sections	 See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

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.

Code : 00314716

Date of issue/Date of revision

: 13 December 2024

SIGMACOVER 456 BASE (LEAD FREE COLOURS)

SECTION 7: Handling and storage

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
x ylene	EH40/2005 WELs (United Kingdom (UK), 1/2020) [xylene, o-,m-,p-
	or mixed isomers] Absorbed through skin.
	STEL 15 minutes: 441 mg/m ³ .
	TWA 8 hours: 50 ppm.
	TWA 8 hours: 220 mg/m ³ .
	STEL 15 minutes: 100 ppm.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed
	through skin.
	STEL 15 minutes: 552 mg/m ³ .
	STEL 15 minutes: 125 ppm.
	TWA 8 hours: 100 ppm.
	TWA 8 hours: 441 mg/m ³ .
2-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020)
	STEL 15 minutes: 231 mg/m ³ .
	STEL 15 minutes: 75 ppm.
	TWA 8 hours: 154 mg/m ³ .
	TWA 8 hours: 50 ppm.

Biological exposure indices

Product/ingredient name	Exposure indices		
xylene	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.		
procedures Standard BS I exposure by ir measurement Guide for the chemical and atmospheres measurement	build be made to monitoring standards, such as the following: British EN 689 (Workplace atmospheres - Guidance for the assessment of abalation to chemical agents for comparison with limit values and strategy) British Standard BS EN 14042 (Workplace atmospheres - application and use of procedures for the assessment of exposure to biological agents) British Standard BS EN 482 (Workplace General requirements for the performance of procedures for the of chemical agents) Reference to national guidance documents for the determination of hazardous substances will also be required.		
DNELs/DMELs			

Code : 00314716 Date of issue/Date of revision : 13 December 2024

SIGMACOVER 456 BASE (LEAD FREE COLOURS)

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	Exposure	Value	Population	Effects
xylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	
	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	
	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
				population	-
				[Consumers]	
ethylbenzene	DMEL	Long term Inhalation	442 mg/m ³	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	
	DNEL	Long term Inhalation	310 mg/m ³	Workers	Local
Octadecanoic acid,	DNEL	Long term Inhalation	0.055 mg/m ³	General population	
12-hydroxy-, reaction			0		
products with					
ethylenediamine					
	DNEL	Long term Inhalation	0.308 mg/m ³	Workers	Local

PNECs

Product/ingredient name	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
English (GB)	United Kingdom (UK	()	7/16

Code :

: 00314716

Date of issue/Date of revision

: 13 December 2024

SIGMACOVER 456 BASE (LEAD FREE COLOURS)

SECTION 8: Exposure controls/personal protection

	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 : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation Appropriate engineering or other engineering controls to keep worker exposure to airborne contaminants below controls 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 : Wash hands, forearms and face thoroughly after handling chemical products, before **Hygiene measures** eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eye/face protection Chemical splash goggles. **Skin protection** 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. 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 antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. : Appropriate footwear and any additional skin protection measures should be selected Other skin protection 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** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some controls cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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

- Code
- : 00314716 SIGMACOVER 456 BASE (LEAD FREE COLOURS)
- Date of issue/Date of revision

: 13 December 2024

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	: Various
Odour	: Aromatic.
Odour threshold	: Not available.
Melting point/freezing point	:
Initial boiling point and	: >37.78°C (>100°F)
boiling range	
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Not available.
Flash point	: Closed cup: 27°C (80.6°F)
Auto-ignition temperature	: 430°C (806°F)
рН	: Not applicable.
	Not applicable. insoluble in water.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s

Solubilitv(ies)

Solub	Solubility(ies) :		
Med	lia	Result	
cold	water	Not soluble	

Miscible with water : No.

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

÷

Vapour pressure

	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			
Relative density	: 1.4					
Explosive properties	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.					
Oxidising properties	: Product does not present an oxidizing hazard.					
Particle characteristics						
Median particle size	: Not	applicable				

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products Refer to protective measures listed in sections 7 and 8.

English (GB)	United Kingdom (UK)	9/16

Code	: 00314716	Date of issue/Date of revision	: 13 December 2024
SIGMACOVE	R 456 BASE (LEAD FREE COLOURS)		

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products	:	Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides halogenated compounds metal oxide/ oxides
10.5 Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 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-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
1,3-bis[12-hydroxy-	LC50 Inhalation Dusts and	Rat	>5.08 mg/l	4 hours
octadecamide-N-methylene] -benzene	mists			
Octadecanoic acid,	LC50 Inhalation Dusts and	Rat	5.05 mg/l	4 hours
12-hydroxy-, reaction products with ethylenediamine	mists			
2	LD50 Oral	Rat	>2000 mg/kg	-

There are no data available on the mixture itself.

Conclusion/Summary 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 456 BASE (LEAD FREE COLOURS)	N/A	8908.6	N/A	51.9	N/A
xylene	4300	1700	N/A	11	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	N/A	N/A	N/A	N/A	5.05

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
epoxy resin (MW ≤ 700)	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit	-	mg - -	-
Conclusion/Summary	: Not available.				
Skin	: There are no data available on	the mixture its	elf.		
Eyes	: There are no data available on the mixture itself.				
Respiratory <u>Sensitisation</u>	: There are no data available on the mixture itself.				

Code

: 00314716 SIGMACOVER 456 BASE (LEAD FREE COLOURS)

Date of issue/Date of revision : 13 December 2024

SECTION 11: Toxicological information

Product/ingredient name	Route of exposure		Species	I	Result
epoxy resin (MW ≤ 700) Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	skin skin	Mouse Guinea pię	3	Sensitising Sensitising	
Conclusion/Summary	•			÷	
Skin	: There are no da	ta available	on the mixture itsel	f.	
Respiratory	: There are no da	ta available	on the mixture itsel	f.	
<u>Mutagenicity</u>					
Conclusion/Summary <u>Carcinogenicity</u>	: There are no da	ta available	on the mixture itsel	f.	
Conclusion/Summary	: There are no data available on the mixture itself.				
Reproductive toxicity					
Conclusion/Summary Teratogenicity	: There are no da	ta available	on the mixture itsel	f.	
Conclusion/Summary	: There are no da	ta available	on the mixture itsel	f.	
Specific target organ toxicity	(single exposure)			
Preduct/incre		-	Catagory	Deute of	Terreterren

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

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	
xylene	ASPIRATION HAZARD - Category 1	
ethylbenzene	ASPIRATION HAZARD - Category 1	

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing

English (GB)	United Kingdom (UK)	11/16

Code : 00314716 SIGMACOVER 456 BASE (LE	Date of issue/Date of revision : 13 December 202 FREE COLOURS)	:4
SECTION 11: Toxico	gical information	
Skin contact	Adverse symptoms may include the following: irritation redness dryness cracking	
Ingestion	No specific data.	
Delayed and immediate effec	as well as chronic effects from short and long-term exposure	
Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff	<u>s</u>	
Not available.		
Conclusion/Summary	Not available.	
General	Prolonged or repeated contact can defat the skin and lead to irritation, cracking a or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.	and/
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
epoxy 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
2	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-	Acute LC50 >100 mg/l	Fish	96 hours
octadecamide-N-methylene]			
benzene			
Octadecanoic acid,	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella	72 hours
12-hydroxy-, reaction	, and the second s	subcapitata	
products with			
ethylenediamine			
-	Acute EC50 >10 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >10 mg/l	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

Code : 00314716

Date of issue/Date of revision

: 13 December 2024

SIGMACOVER 456 BASE (LEAD FREE COLOURS) **SECTION 12: Ecological information**

Product/ingredient name	Test	Result	Dose	Inoculum
Poxy resin (MW ≤ 700) ethylbenzene Octadecanoic acid, 12-hydroxy-, reaction products with	OECD 301F - 301D Ready Biodegradability - Closed Bottle	5 % - 28 days 79 % - Readily - 10 days 22 % - 28 days		
ethylenediamine	Test			

Conclusion/Summary	: Not available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ylene 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
ylene 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

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

<u>Product</u>	
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	
Waste catalogue	

- Code : 00314716
- SIGMACOVER 456 BASE (LEAD FREE COLOURS)
- Date of issue/Date of revision

: 13 December 2024

SIGNACOVER 456 BASE (LEAD FREE COLOURS)

SECTION 13: Disposal considerations

	Waste code	Waste designation
	08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
P	ackaging	·
	Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste

: 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 cont 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 internally. Avoid dispersal of spilt material and runoff and contact with vays, 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	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111	III	111	111
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 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 Transport in bulk : Not available. according to IMO instruments

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

Code : 00314716

SIGMACOVER 456 BASE (LEAD FREE COLOURS)

Date of issue/Date of revision

: 13 December 2024

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 456 BASE (LEAD FREE COLOURS)	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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758			
<mark>Code</mark> SIGMACOV	: 00314716	Date of issue/Date of revision	: 13 December 2024
SECTIO	N 16: Other information		
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 throug	h prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting	effects.	
H412	Harmful to aquatic life with long lastin		
H413	May cause long lasting harmful effect	•	

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
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
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 Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
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	: 13 December 2024
Date of previous issue	: 11 October 2024
Prepared by	: EHS
Version	: 1.05

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.