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

: 26 April 2024

Version : 1.01



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

1.1 Product identifier	
Product name	: SIGMACOVER 456 BASE RAL 1003
Product code	: 00243401
Product type	: Liquid.
Other means of identification	: Not available.
1.2 Relevant identified uses of	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 UK CLP/GHS Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 1, H372 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 SIGMACO	: 00243401 WER 456 BASE RAL 1003	Date of issue/Date of revision	: 26 April 2024
		-41	

SECTION 2: Hazards	ic	lentification
Hazard statements	:	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure. 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. Do not breathe 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.
Supplemental label elements	:	P280, P210, P273, P260, P264, P501
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

EC: 238-878-4 CAS: 14808-60-7 REACH #: 01-2119488216-32	≥10 - ≤25 ≥10 - <20	STOT RE 1, H372 (inhalation) Flam. Liq. 3, H226	[1] [2]
	≥10 - <20	Flam Lig 3 H226	
EC: 215-535-7 CAS: 1330-20-7		Acute Tox. 4, H312 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]
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]
REACH #:	≥1.0 - ≤5.0	Flam. Liq. 2, H225	[1] [2]
	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 REACH #:	REACH #: ≥5.0 - ≤10 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 Z5068-38-6 REACH #: ≥1.0 - ≤5.0	REACH #: ≥5.0 - ≤10 Eye Irrit. 2, H319 01-2119456619-26 EC: 500-033-5 Skin Sens. 1, H317 CAS: 25068-38-6 Aguatic Chronic 2, H411

Code : 00243401 SIGMACOVER 456 BASE RAL 1		of issue/Date of revis	sion : 26 April 202	24
SECTION 3: Composition/information on ingredients				
	01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4		Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Hydrocarbons, C9, aromatics > 0.1% cumene	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	<1.0	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]

			See Section 16 for the full text of the H statements declared above.	
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	≤0.30	Aquatic Chronic 2, H411 EUH066 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	[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. 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 pxylene, 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. 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

English (GB)

Code : 00243401 SIGMACOVER 456 BASE RA	Date of issue/Date of revision : 26 April 2024
SECTION 4: First aid	
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 reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	utoms
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 immedi	iate medical attention and special treatment needed
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.
5.1 Extinguishing media Suitable extinguishing	: Use dry chemical, CO ₂ , water spray (fog) or foam.
media	
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising f	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 nitrogen 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.

Code : 00243401

Date of issue/Date of revision

: 26 April 2024

SIGMACOVER 456 BASE RAL 1003

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	te	ctive 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	со	ntainment 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 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 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 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 : 00243401 SIGMACOVER 456 BASE RAL 1003 Date of issue/Date of revision

: 26 April 2024

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. 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
rystalline silica, respirable powder (<10 microns)	EH40/2005 WELs (United Kingdom (UK), 1/2020). [silica,
	respirable crystalline respirable fraction]
	TWA: 0.1 mg/m ³ 8 hours. Form: Respirable fraction
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p-
	or mixed isomers] Absorbed through skin.
	STEL: 441 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 220 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 552 mg/m ³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 548 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 274 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
x ylene	XYLENES
	Id be made to appropriate monitoring standards. Reference to e documents for methods for the determination of hazardous also be required.

DNELs/DMELs

: 00243401 Code

SIGMACOVER 456 BASE RAL 1003

Date of issue/Date of revision : 26 April 2024

SECTION 8: Exposure controls/personal protection

Kylene DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Product/ingredient name	Туре	Exposure	Value	Population	Effects
ethylbenzene DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	x ylene	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
PNEL Long term Dermal 125 mg/kg bw/day Cencral population Systemic DNEL Long term Inhalation 221 mg/m3 Workers Systemic DNEL Long term Inhalation 221 mg/m3 Workers Systemic DNEL Short term Inhalation 226 mg/m3 Workers Systemic DNEL Short term Inhalation 226 mg/m3 Workers Systemic DNEL Short term Inhalation 225 mg/m3 Workers Systemic DNEL Short term Inhalation 12.25 mg/m3 Workers Systemic DNEL Short term Inhalation 12.25 mg/m3 Workers Systemic DNEL Short term Dermal 3.571 mg/kg bw/day Workers Systemic DNEL Short term Oral 0.75 mg/kg bw/day General Systemic DNEL Short term Inhalation 1.422 mg/m3 Workers Systemic DNEL Long term Oral 0.75 mg/kg bw/day General Systemic DNEL Long term Inhalation 0.75 mg/kg bw/day Genera		DNEL	Long term Inhalation		General population	Local
epoxy resin (MW ≤ 700) DNEL DNEL Long term Inhalation DNEL Short term Dermal DNEL Short term Dermal DNEL Short term Dermal DNEL Short term Dermal DNEL Short term Dermal DNEL Long term Dermal DNEL Long term Oral 3.571 mg/kg bw/day 3.571 mg/kg bw/day Shorters Systemic General DNEL Long term Oral Workers Systemic General DNEL Long term Oral Systemic Consumers] General DNEL Long term Inhalation DNEL Long term Inhalation Systemic General population Systemic General populat		DNEL				Systemic
epoxy resin (MW ≤ 700) DNEL DNEL Long term Inhalation DNEL Short term Inhalation DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL		DNEL	Long term Dermal	125 mg/kg bw/day		
epoxy resin (MW ≤ 700) DNEL DNEL DNEL DNEL Short term inhalation DNEL Short term inhalation DNEL DNEL Short term inhalation DNEL DNEL DNEL Short term inhalation DNEL DNEL Short term inhalation DNEL DNEL DNEL Short term inhalation DNEL DNEL DNEL DNEL Short term Dermal DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL		DNEL				•
epoxy resin (MW ≤ 700) DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL					Workers	
epoxy resin (MW ≤ 700) DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL						
epoxy resin (MW ≤ 700) DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL				0		
PerformDNEL <b< td=""><td></td><td></td><td></td><td></td><td></td><td></td></b<>						
epoxy resin (MW ≤ 700) DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL				0		
epoxy resin (MW ≤ 700) DNEL DNEL Long term Inhalation DNEL 12.25 mg/m³ Workers Systemic DNEL DNEL Short term Dermal 8.33 mg/kg bw/day Workers Systemic DNEL DNEL Short term Dermal 8.33 mg/kg bw/day Workers Systemic DNEL DNEL Short term Dermal 8.33 mg/kg bw/day General population [Consumers] Systemic DNEL DNEL Short term Dermal 3.571 mg/kg bw/day General population [Consumers] Systemic general DNEL Short term Oral 0.75 mg/kg bw/day General population [Consumers] Systemic general Systemic population DNEL Short term Oral 0.75 mg/kg bw/day General population [Consumers] Systemic general population [Consumers] Systemic general population [Consumers] Systemic general population [Consumers] Systemic general population [Consumers] 2-methoxy-1-methylethyl acetate DNEL [DNEL Long term Inhalation DNEL [DNEL Ing term Inhalation DNEL [Long term Inhalation D						
DNEL DNEL<	e_{DOXV} resin (MW < 700)					
DNEL DNEL DNEL DNELDNEL Short term Dermal DNEL3.3 mg/kg bw/day S.771 mg/kg bw/day 3.571 mg/kg bw/dayWorkers Workers General population [Consumers] General population [Consumers]Systemic Systemic population [Consumers]ethylbenzeneDNEL DNELLong term Oral0.75 mg/kg bw/dayWorkers General population [Consumers]Systemic Systemic population [Consumers]ethylbenzeneDNEL DNEL DNELLong term Oral0.75 mg/kg bw/dayWorkers General population [Consumers]Systemic Systemic population [Consumers]ethylbenzeneDNEL DMEL DNEL DNEL DNEL DNEL DNEL DNEL Long term Inhalation DNEL <b< td=""><td></td><td></td><td></td><td></td><td></td><td></td></b<>						
DNEL DNEL DNELShort term Dermal Long term Dermal8.33 mg/kg bw/day 3.571 mg/kg bw/dayWorkers General General Dopulation [Consumers] General Dopulation [Consumers]Systemic Systemic population [Consumers]ethylbenzeneDMEL DMELLong term Oral0.75 mg/kg bw/dayGeneral Systemic population [Consumers]Systemic Systemic population [Consumers]ethylbenzeneDMEL DMELShort term Oral0.75 mg/kg bw/dayGeneral Systemic population [Consumers]ethylbenzeneDMEL DMEL DMELLong term Inhalation DMEL DMEL DMELLong term Inhalation DMEL Long term Inhalation DMEL DMEL DMEL Long term Inhalation DMEL 						
DNELLong term Dermal3.571 mg/kg bw/dayGeneral population [Consumers] General population [Consumers]SystemicDNELShort term Dermal3.571 mg/kg bw/dayGeneral population [Consumers]Systemic population [Consumers]ethylbenzeneDMELLong term Oral0.75 mg/kg bw/dayGeneral population [Consumers]Systemic population [Consumers]ethylbenzeneDMELLong term Inhalation DMEL442 mg/m³ NELWorkersSystemic Systemic2-methoxy-1-methylethyl acctateDNELLong term Inhalation DNEL1.6 mg/kg bw/day 15 mg/m³General population (General population Systemic Systemic Systemic Systemic Systemic 1.6 mg/kg bw/dayGeneral population Systemic System						
Population (Consumers) GeneralSystemic (Consumers) GeneralDNELDNELLong term Oral0.75 mg/kg bw/dayGeneral (Consumers) GeneralSystemic population (Consumers) GeneralethylbenzeneDNELLong term Inhalation DMEL0.75 mg/kg bw/dayGeneral (Consumers) GeneralSystemic population (Consumers) GeneralethylbenzeneDMELLong term Inhalation DMEL0.75 mg/kg bw/day (Sor term OralVorkersLocal Systemic Systemic Systemic (Consumers)ethylbenzeneDMELLong term Inhalation DMELNorker moral Long term Inhalation DNEL16 mg/kg bw/day 15 mg/m³General population Systemic Systemic WorkersSystemic Systemic Systemic Local Systemic S						
PNELShort term Dermal3.571 mg/kg bw/day[Consumers] General population [Consumers]Systemic SystemicethylbenzeneDNELLong term Oral0.75 mg/kg bw/dayGeneral General population [Consumers]Systemic systemicethylbenzeneDMELLong term Inhalation DMEL0.75 mg/kg bw/dayGeneral General population [Consumers]Systemic systemicethylbenzeneDMEL DMELLong term Inhalation DNEL442 mg/m³ 884 mg/m³Workers WorkersSystemic Systemic Systemic Systemic Systemic Systemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL16 mg/kg bw/day 33 mg/m³General population Systemic WorkersSystemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic Systemic DNEL Long term Inhalation DNEL Long term Dermal DNEL Long term Inhal		DINEL	Long term Dermai	5.57 T mg/kg bw/uay		Systemic
DNEL ethylbenzeneDNEL DNELShort term Dermal DNEL3.571 mg/kg bw/day DNELGeneral population [Consumers] General opulation [Consumers]Systemic systemic population [Consumers]ethylbenzeneDMEL DMELLong term Inhalation DMEL DNELDMEL Long term Inhalation DMEL Long term Inhalation DNEL DNEL Long term Inhalation DNEL <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
ethylbenzeneDNEL DNELLong term Oral0.75 mg/kg bw/daypopulation [Consumers] General 			Chartterre Derread			Curatamaia
Image: branch		DNEL	Short term Dermai	3.57 T mg/kg bw/day		Systemic
Image: bit is the state of t						
ethylbenzeneDNEL DNELShort term Oral0.75 mg/kg bw/daypopulation [Consumers] General opulation [Consumers]Systemic systemicethylbenzeneDMEL DMELLong term Inhalation DNEL442 mg/m³ 884 mg/m³WorkersSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL16 mg/kg bw/day 15 mg/m³General population Systemic General population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL16 mg/kg bw/day UorkersGeneral population SystemicSystemic Systemic1DNEL DNELLong term Inhalation DNELShort term Inhalation DNEL33 mg/m³General population General populationSystemic Systemic442 mg/m³ NELLong term Inhalation DNELShort term Inhalation DNEL33 mg/m³General population General populationSystemic Systemic442 mg/m³ So ng/m³Long term Inhalation DNELShort term Inhalation DNEL33 mg/m³General population SystemicSystemic Systemic442 mg/m³ So ng/m³DNELLong term Dermal DNELSystemic Dong term Inhalation DNELSystemic Dong term Inhalation DNELSystemic SystemicSystemic Systemic0.1% cumeneDNEL DNELLong term Dermal DNELLong term Dermal DNELSystemic Dong term InhalationSystemic SystemicSystemic Systemic0.1% cumeneDNEL DNELLong term Dermal DNELDNEL				0.75 // / //		o ()
ethylbenzeneDNELShort term Oral0.75 mg/kg bw/day[Consumers] General population (Consumers]SystemicethylbenzeneDMELLong term Inhalation DMELShort term Inhalation DNEL442 mg/m³WorkersLocalDMELLong term Inhalation DNELShort term Inhalation DNEL16 mg/kg bw/day Uorg term Daral DNELGeneral population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL77 mg/m³ Uorg term Inhalation DNEL33 mg/m³ General populationGeneral population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL33 mg/m³ General populationGeneral population UorkersSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL33 mg/m³ General populationGeneral population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL33 mg/m³ General populationGeneral population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Dermal DNEL33 mg/m³ General populationGeneral population SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Dermal DNELCong term Dermal DNELSystemic SystemicGeneral population SystemicSystemic Systemic10DNEL DNELLong term Inhalation DNEL<		DNEL	Long term Oral	0.75 mg/kg bw/day	-	Systemic
ParticipantDNEL populationShort term Oral0.75 mg/kg bw/dayGeneral population [Consumers]SystemicethylbenzeneDMEL DMEL DN						
ethylbenzeneDMEL DMEL DMEL DMEL DMEL DMEL DMEL DMEL DN						
ethylbenzeneDMEL DMEL DMELLong term Inhalation DMEL DMELLong term Inhalation DNEL Long term Inhalation DNEL DNEL DNEL DNEL DNEL DNELLong term Inhalation DNEL Long term Inhalation DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNELLong term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL DN		DNEL	Short term Oral	0.75 mg/kg bw/day		Systemic
ethylbenzeneDMEL DMELLong term Inhalation DMEL442 mg/m³ 844 mg/m³WorkersLocal2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNELLong term Inhalation DNEL16 mg/kg bw/day 293 mg/m³WorkersLocal SystemicSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNELShort term Inhalation DNEL77 mg/m³ 180 mg/kg bw/day 293 mg/m³Workers WorkersSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNEL33 mg/m³ 33 mg/m³General population General population 33 mg/m³Systemic Systemic442 mg/m³ boxLong term Inhalation 293 mg/m³Systemic WorkersSystemic Systemic442 mg/m³ boxLong term Inhalation 293 mg/m³General population WorkersSystemic Systemic442 mg/m³ boxLong term Inhalation 293 mg/m³General population WorkersSystemic Systemic442 mg/m³ boxLong term Inhalation DNEL <b< td=""><td></td><td></td><td></td><td></td><td></td><td></td></b<>						
DMEL DNEL DNEL 2-methoxy-1-methylethyl acetateDMEL DNEL <b< td=""><td></td><td></td><td></td><td></td><td></td><td></td></b<>						
DNEL 2-methoxy-1-methylethyl acetateDNEL DNEL DNEL DNELLong term Inhalation Long term Inhalation DNEL DNEL DNEL1.6 mg/kg bw/day 15 mg/m³General population General population Workers Workers General populationSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNEL DNELLong term Inhalation DNEL1.6 mg/kg bw/day 15 mg/m³General population General populationSystemic Systemic2-methoxy-1-methylethyl acetateDNEL DNELDNEL DNELLong term Inhalation DNEL DNELShort term Inhalation DNEL Long term Oral DNEL DNEL33 mg/m³ 36 mg/kg bw/day 275 mg/m³General population General populationSystemic Systemic Systemic4Hydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNELLong term Dermal DNEL DNEL DNEL DNEL DNELLong term Dermal Long term Dermal DNEL DNEL DNEL DNEL DNEL DNEL DNELLong term Dermal Long term Dermal Long term Inhalation DNEL <td>ethylbenzene</td> <td></td> <td></td> <td></td> <td>Workers</td> <td></td>	ethylbenzene				Workers	
2-methoxy-1-methylethyl acetateDNEL DNEL DNEL 						
2-methoxy-1-methylethyl acetateDNEL DNEL DNEL DNEL DNELLong term Inhalation Long term Inhalation Long term Inhalation Long term Inhalation77 mg/m³ 180 mg/kg bw/day 293 mg/m³Workers Workers Systemic Workers General populationSystemic Local Local2-methoxy-1-methylethyl acetateDNEL DNEL DNELLong term Inhalation Long term Inhalation Long term Oral Long term Inhalation DNEL<		DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
2-methoxy-1-methylethyl acetateDNEL DNEL DNELLong term Inhalation Long term Inhalation180 mg/kg bw/day 293 mg/m³Workers General populationSystemic Local2-methoxy-1-methylethyl acetateDNEL DNELLong term Inhalation DNELShort term Inhalation Long term Inhalation33 mg/m³General population General populationSystemic SystemicNet DNEL DN		DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
2-methoxy-1-methylethyl acetateDNEL DNEL DNELShort term Inhalation Long term Inhalation Long term Inhalation DNEL <br< td=""><td></td><td>DNEL</td><td>Long term Inhalation</td><td>77 mg/m³</td><td>Workers</td><td>Systemic</td></br<>		DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
2-methoxy-1-methylethyl acetateDNELLong term Inhalation Long term Oral Long term Oral Long term Oral Long term Inhalation DNEL33 mg/m³ General population General population General population General population WorkersLocalHydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNELLong term Inhalation Long term Dermal DNEL DNEL33 mg/m³ General population General population WorkersGeneral population Systemic Systemic Systemic SystemicHydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNELLong term Dermal DNEL DNELShort term Inhalation Long term Dermal Long term Dermal Long term Dermal Long term Dermal DNEL DNEL25 mg/kg bw/day 32 mg/m³Workers General population WorkersSystemic Systemic SystemicOctadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Inhalation DNEL25 mg/kg bw/day 32 mg/m³Workers General population General population Systemic Systemic Systemic		DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
acetateDNEL DNEL DNEL DNEL DNEL Hydrocarbons, C9, aromaticsDNEL DNEL DNEL DNELLong term Inhalation DNEL DNEL DNEL DNEL DNEL DNEL DNELSong term Inhalation DNEL DNE		DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
DNEL DNEL<	2-methoxy-1-methylethyl	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
DNEL DNEL DNEL Hydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNEL DNEL DNEL DNEL DNELLong term Oral Long term Dermal DNEL DNEL DNEL DNEL DNEL DNEL36 mg/kg bw/day 275 mg/m³ 320 mg/kg bw/day 550 mg/m³General population Workers Workers Workers Workers WorkersSystemic Systemic Systemic Systemic Systemic Systemic SystemicHydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNEL DNEL DNELLong term Dermal Long term Dermal Long term Dermal DNEL	acetate		-	-		
DNEL DNEL DNEL Hydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNEL DNEL DNEL DNEL DNELLong term Oral Long term Dermal DNEL DNEL DNEL DNEL DNEL DNEL36 mg/kg bw/day 275 mg/m³ 320 mg/kg bw/day 550 mg/m³General population Workers Workers Workers Workers WorkersSystemic Systemic Systemic Systemic Systemic Systemic SystemicHydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNEL DNEL DNELLong term Dermal Long term Dermal Long term Dermal DNEL		DNEL	Long term Inhalation	33 mg/m ³	General population	Systemic
Hydrocarbons, C9, aromaticsDNEL DNEL DNEL DNEL DNEL DNEL DNELLong term Inhalation Long term Dermal Long term Dermal DNEL DNEL275 mg/m³ 320 mg/kg bw/day 550 mg/m³Workers General population Workers WorkersSystemic Local Systemic Local Systemic Systemic Systemic Sourd term InhalationHydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL DNELLong term Dermal Long term Dermal Long term Dermal Long term Dermal Long term Dermal DNEL275 mg/m³ 320 mg/kg bw/day 150 mg/m³Workers Workers WorkersSystemic Systemic Systemic Systemic Systemic Systemic Systemic SystemicOctadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Oral Long term Inhalation25 mg/kg bw/day 32 mg/m³Workers General population General population General population General population General population						
Hydrocarbons, C9, aromaticsDNEL DNEL DNELLong term Dermal DNEL DNEL320 mg/kg bw/day 550 mg/m³ 796 mg/kg bw/day 150 mg/m³General population Workers WorkersSystemic Local Systemic> 0.1% cumeneDNEL DNELLong term Dermal DNEL25 mg/kg bw/day 150 mg/m³General population WorkersSystemic SystemicO.1% cumeneDNEL DNELLong term Dermal DNELLong term Dermal Long term Inhalation25 mg/kg bw/day 32 mg/m³Workers General population General populationOctadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Inhalation Long term Inhalation0.055 mg/m³General population General population General population General population General populationSystemic Systemic						
Hydrocarbons, C9, aromaticsDNEL DNEL DNELShort term Inhalation Long term Dermal Long term Inhalation550 mg/m³ 796 mg/kg bw/day 150 mg/m³Workers WorkersLocal Systemic> 0.1% cumeneDNEL DNEL DNELLong term Dermal Long term Inhalation25 mg/kg bw/day 32 mg/m³Workers WorkersSystemic SystemicOctadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Inhalation Long term Oral Long term Inhalation25 mg/kg bw/day 32 mg/m³Workers General population General population General population General population General populationSystemic Systemic			0			
Hydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL<						•
Hydrocarbons, C9, aromatics > 0.1% cumeneDNEL DNEL<						
> 0.1% cumeneDNEL D	Hydrocarbons, C9 aromatics					
DNEL DNEL DNEL Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNEL DNEL DNEL DNELLong term Dermal Long term Inhalation Dome Long term Oral Long term Inhalation25 mg/kg bw/day 32 mg/m³ 11 mg/kg bw/day 0.055 mg/m³Workers General population Systemic General population Systemic Systemic DNELSystemic Systemic DNEL						5,5001110
DNEL DNEL DNEL Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNEL		DNFI	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
DNEL Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Dermal Long term Oral Long term Inhalation11 mg/kg bw/day 11 mg/kg bw/day 0.055 mg/m³General population Systemic General populationSystemic Systemic Local						
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNEL DNELLong term Oral Long term Inhalation11 mg/kg bw/day 0.055 mg/m³General population General populationSystemic Local						
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamineDNELLong term Inhalation0.055 mg/m³General populationLocal						
12-hydroxy-, reaction products with ethylenediamine	Octadecanoic acid					
products with ethylenediamine		DINEL		0.000 mg/m		LUCAI
ethylenediamine						
	•					
UNEL LLONG ferm Inhalation LU308 mg/m ³ UVorkers LLocal	etnylenediamine	DNE	Law a fam b. b. J. C.	0.000		1 1
		DNEL	Long term Inhalation	0.308 mg/m ³	vvorkers	Local

PNECs

Code	: 00243401	Date of issue/Date of revision

: 26 April 2024

SIGMACOVER 456 BASE RAL 1003

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
X ylene	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-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
	Marine water	0.0635 mg/l	-
	Fresh water sediment	3.29 mg/kg	-
	Marine water sediment	0.329 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewage Treatment Plant		-

8.2 Exposure controls

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

Individual protection measures

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection <u>Skin protection</u>	: Chemical splash goggles.
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

Code	: 00243401	Date of issue/Date of revision	: 26 April 2024
SIGMACOVE	ER 456 BASE RAL 1003		

SECTION 8: Exposure controls/personal protection

: 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 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.
: 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 specialist before handling this product.
: 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
: 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 physic	al and chei	nical prop	erties		
Appearance					
Physical state	: Liquid.				
Colour	: Yellow				
Odour	: Aroma	tic.			
Odour threshold	: Not available.				
Melting point/freezing point	data fo averag	r the follow	ing ingredient: 2-me C (-131.7°F)	nperature: -66°C (-86.8°F) This is thoxy-1-methylethyl acetate. Weigh	
boiling range	. 201.10	0 (21001)		
Flammability (solid, gas) Upper/lower flammability or explosive limits		st known ra omatic)	ange: Lower: 1.4% ।	Jpper: 7.6% (Solvent naphtha (peti	roleum),
Flash point	: Closed	cup: 27°C	(80.6°F)		
Auto-ignition temperature	:				
Ingredient name		°C	°F	Method	
[4] [1-[[(2,3-dihydro-2-oxo-1H-benzimic amino]carbonyl]-2-oxopropyl]azo]benz		320	608		
рН	: Not ap	plicable.			
			soluble in water.		
Viscosity	: Kinema	atic (40°C):	>21 mm²/s		
Solubility(ies)	:				
Media	Resu	ult			
cold water	Not s	oluble			
Miscible with water	: No.				
Partition coefficient: n-octano water	/ : Not ap	plicable.			
Vapour pressure	:				

English (GB)

Code	: 00243401	Date of issue/Date of revision	: 26 April 2024
SIGMACOV	'ER 456 BASE RAL 1003		

SECTION 9: Physical and chemical properties

			<u> </u>				
	V	apour Pres	sure at 20°C	V	Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
e thylbenzene	9.30076	1.2					
Relative density	: 1.3	2	Į			I	
Vapour density		hest known rage: 3.78		1) (2-methoxy-	1-methylet	hyl acetate). Weight	
Explosive properties			self is not explosive with air is possible		ation of an e	explosible mixture of	
Oxidising properties	: Pro	duct does r	not present an oxid	dizing hazard.			
Particle characteristics							
Median particle size	: Not	applicable					

SECTION 10: Stability and reactivity

10.1 Reactivity	No spec	ific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	The proc	duct is stable.
10.3 Possibility of	Under n	ormal conditions of storage and use, hazardous reactions will not occur.
hazardous reactions		
10.4 Conditions to avoid	When o	vegeed to high temperatures may produce bezerdeus decomposition products
10.4 Conditions to avoid		xposed to high temperatures may produce hazardous decomposition products.
	Refer to	protective measures listed in sections 7 and 8.
10.5 Incompatible materials	Keep aw	ay from the following materials to prevent strong exothermic reactions:
	oxidising	agents, strong alkalis, strong acids.
10.6 Hazardous	Dependi	ng on conditions, decomposition products may include the following
decomposition products		s: carbon oxides nitrogen oxides sulfur oxides halogenated compounds
	metal ox	ide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
x ylene	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-methoxy-1-methylethyl	LC50 Inhalation Vapour	Rat	30 mg/l	4 hours
acetate				
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
Hydrocarbons, C9,	LD50 Dermal	Rabbit	>3160 mg/kg	-
aromatics > 0.1% cumene				
	LD50 Oral	Rat - Female	3492 mg/kg	-
Octadecanoic acid,	LC50 Inhalation Dusts and	Rat	5.05 mg/l	4 hours
12-hydroxy-, reaction	mists		-	
products with				
ethylenediamine				
-	LD50 Oral	Rat	>2000 mg/kg	-

Date of issue/Date of revision

: 26 April 2024

SIGMACOVER 456 BASE RAL 1003

SECTION 11: Toxicological information

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 456 BASE RAL 1003	N/A	9869.5	N/A	57.6	N/A
xylene	4300	1700	N/A	11	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
Hydrocarbons, C9, aromatics > 0.1% cumene	3492	N/A	N/A	N/A	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
x ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
epoxy resin (MW ≤ 700)	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-

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

1	There are no data available on the mixture itself.
---	--

```
Respiratory : There are no data available on the mixture itself.
```

Sensitisation

Eyes

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

Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Mutagenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Reproductive toxicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Teratogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
Hydrocarbons, C9, aromatics > 0.1% cumene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Code	: 00243401	Date of issue/Date of revision	: 26 April 2024
SIGMACOV	ER 456 BASE RAL 1003		

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
	Category 1	inhalation	-
	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result
kylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Hydrocarbons, C9, aromatics > 0.1% cumene	ASPIRATION HAZARD - Category 1

rijarocarbonic, ec, aromatice			1.0		
Information on likely routes of exposure	:	Not available.			
Potential acute health effects					
Eye contact	:	Causes serious eye irritation.			
Inhalation	1	No known significant effects or cri	itical	hazar	ds.
Skin contact	:	Causes skin irritation. Defatting to	o the	skin.	May cause an allergic skin reaction.
Ingestion	1	No known significant effects or cri	itical	hazar	ds.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

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

<u>Short term exposure</u>		
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 effe	<u>ts</u>	
Not available.		
Conclusion/Summary	Not available.	
General	 Causes damage to organs through prolonged or repeated exposure. 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.	

English (GB)	United Kingdom (UK)	12/17

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

Code : 00243401

Date of issue/Da

Date of issue/Date of revision : 26 April 2024

SIGMACOVER 456 BASE RAL 1003

SECTION 11: Toxicological information

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
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
Hydrocarbons, C9, aromatics > 0.1% cumene	EC50 3.2 mg/l	Daphnia	48 hours
	LC50 9.2 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 Acute LC50 >10 mg/l	Daphnia - Daphnia magna Fish - Oncorhynchus mykiss	48 hours 96 hours

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
epoxy resin (MW ≤ 700)	OECD 301F	5 % - 28 days 79 % - Readily - 10 days	-	-
ethylbenzene 2-methoxy-1-methylethyl	-	83 % - Readily - 28 days	-	-
acetate Hydrocarbons, C9,	-	75 % - Readily - 28 days	-	-
aromatics > 0.1% cumene Octadecanoic acid,	301D Ready	22 % - 28 days	-	-
12-hydroxy-, reaction products with	Biodegradability - Closed Bottle	5		
ethylenediamine	Test			

Conclusion/Summary

: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
x ylene	-	-	Readily
epoxy resin (MW \leq 700)	-	-	Not readily
ethylbenzene	-	-	Readily
2-methoxy-1-methylethyl	-	-	Readily
acetate			
Hydrocarbons, C9,	-	-	Readily
aromatics > 0.1% cumene			
Octadecanoic acid,	-	-	Inherent
12-hydroxy-, reaction			
products with			
ethylenediamine			

12.3 Bioaccumulative potential

Code : 0	0243401	Date of issue/Date of revision	: 26 April 2024
SIGMACOVER 4	56 BASE RAL 1003		

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
epoxy resin (MW \leq 700)	3	31	Low
ethylbenzene	3.6	79.43	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	>5.86	-	High

12.4 Mobility in soil	
Soil/water partition coefficient (K _{oc})	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product 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 <u>Waste catalogue</u>	: Yes.
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.	

Code	: 00243401	Date of issue/Date of revision	: 26 April 2024
SIGMACOVE	R 456 BASE RAL 1003		

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
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
14.5 Environmental hazards Marine pollutant substances	No. Not applicable.	Yes. Not applicable.	No. Not applicable.	No. Not applicable.
Additional inform	ation			
Tunnel code : ADN : IMDG :	None identified. (D/E) The product is only reguvessels. None identified. None identified.	lated as an environmenta	lly hazardous substance v	when transported in tai

```
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	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

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

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Code : 00243401

Date of issue/Date of revision

: 26 April 2024

SIGMACOVER 456 BASE RAL 1003

SECTION 15: Regulatory information

Category

P5c

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
Quartz (SiO2)	Exposure Limits EH40	silica, respirable crystalline respirable fraction	Carc.	-

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level EUH statement = GB CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
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 RE 1, H372	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.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Code : 00243401 SIGMACOVER 456 BASE RAL 1003	Date of issue/Date of revision	: 26 April 2024
SECTION 16: Other information		

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
Carc. 1B	CARCINOGENICITY - Category 1B
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 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
History	
Date of issue/ Date of revision	: 26 April 2024
TEVISION	

Date of previous issue	: 9 November 2022
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.