SAFETY DATA SHEET

Date of issue/Date of revision

: 7 June 2023

Version : 3.11

pDG

Europe

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

1.1 Product identifier

Product name	:	SIGMASHIELD 880 BASE BASE L		
Product code	:	00346479		
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 responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341 STOT RE 2, H373 Aquatic Chronic 3, H412 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above.

English (US)

Europe

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SECTION 2: Hazards identification

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

2.2 Label elements

Hazard	pictograms
That area in a	protogramo



Signal word	:	Warning
Hazard statements	:	Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor.
Response	:	Get medical advice or attention if you feel unwell.
Storage	1	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P202, P280, P210, P260, P314, P501
Hazardous ingredients	:	Epoxy resin (MW ≤ 700) Epoxy Resin (700 <mw<=1100)< p=""> Phenol, methylstyrenated crystalline silica, respirable powder (<10 microns) 2,3-epoxypropyl neodecanoate 1,3-bis[12-hydroxy-octadecamide-N-methylene]-benzene</mw<=1100)<>
Supplemental label elements	:	Contains epoxy constituents. May produce an allergic reaction. Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requiren	nen	<u>ts</u>
Containers to be fitted with child-resistant fastenings		Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		

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SECTION 2: Hazards identification				
Product meets the criteria for PBT or vPvB	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.			
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.			

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6	≥10 - ≤22	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥5.0 - ≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Epoxy Resin (700 <mw <=1100)</mw 	CAS: 25036-25-3	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1]
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]
crystalline silica, respirable powder (<10 microns)	EC: 238-878-4 CAS: 14808-60-7	≥1.0 - ≤5.0	STOT RE 1, H372 (inhalation)	-	[1] [2]
2,3-epoxypropyl neodecanoate	REACH #: 01-2119431597-33 EC: 247-979-2 CAS: 26761-45-5	≥0.10 - ≤2.1	Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411	-	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
1,3-bis[12-hydroxy-	REACH #:	≥1.0 - ≤5.0	Skin Sens. 1, H317	-	[1] [2]
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SECTION 3: Composition/information on ingredients

octadecamide-N- methylene]-benzene	01-2119962189-26 CAS: 911674-82-3 Index: 616-198-00-2	Aquatic Chronic 4, H413	
		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. <u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

This mixture contains \geq 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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 recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	:	If swallowed, seek medical advice immediately and show this 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	
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/sympton	<u>ns</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	No specific data.

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SECTION 4: First aid	measures
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
4.3 Indication of any immedia	ate 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.
SECTION 5: Firefight	ting 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 fi	rom the substance or mixture
Hazards from the substance or mixture	: Flammable liquid and vapor. 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 halogenated compounds metal oxide/oxides
5.3 Advice for firefighters	
Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
SECTION 6: Acciden	tal release measures
6.1 Personal precautions, pre	otective 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 spilled material. Shut off all ignition sources

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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SECTION 6: Accident	al release measures
For emergency responders	: If specialized 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 spilled 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 materials for	r containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
6.4 Reference to other sections	 See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor 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.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EL	J)
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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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values			
xylene	EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed			
	through skin.			
	STEL: 442 mg/m ³ 15 minutes.			
	STEL: 100 ppm 15 minutes.			
	TWA: 221 mg/m³ 8 hours.			
	TWA: 50 ppm 8 hours.			
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2022).			
	TWA: 152 mg/m ³ 8 hours.			
	TWA: 50 ppm 8 hours.			
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 1/2022). [Silica, crystalline]			
	TWA: 0.025 mg/m ³ 8 hours. Form: Respirable			
ethylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin.			
	STEL: 884 mg/m ³ 15 minutes.			
	STEL: 200 ppm 15 minutes.			
	TWA: 442 mg/m ³ 8 hours.			
	TWA: 100 ppm 8 hours.			
1,3-bis[12-hydroxy-octadecamide-N-methylene]-	ACGIH TLV (United States).			
benzene	TWA: 3 mg/m³, (Respirable fraction)			

procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	Exposure	Value	Population	Effects
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
	DITLE	Long torm oral	o.r o mg/ng bu/day	population	Cyclonno
				[Consumers]	
	DNEL	Short term Oral	0.75 mg/kg bw/day	General	Systemic
			0.75 mg/kg bw/day	population	Oysternic
				[Consumers]	
a de ne		Chartterne linheletien	260	• •	Custansia
xylene	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m³	General population	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	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	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
Phenol, methylstyrenated	DNEL	Long term Oral	0.2 mg/kg bw/day	General population	Systemic
i nenoi, metryistyrenated	DNEL	Long term Inhalation	0.348 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	1.41 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	1.67 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.5 mg/kg bw/day	Workers	Systemic
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m ³	General population	Local
2-methypropan-1-or			0		
2.2. 000/0/07001/	DNEL	Long term Inhalation	310 mg/m ³	Workers	Local
2,3-epoxypropyl neodecanoate	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4 mg/m³	General population	Systemic
	DNEL	Long term Dermal	4.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.88 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	11.76 mg/m ³	Workers	Systemic
ethylbenzene	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		Workers	Systemic
			180 mg/kg bw/day		
	DNEL	Short term Inhalation	293 mg/m³	Workers	Local
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SECTION 8: Exposure controls/personal protection

DMEL	Long term Inhalation	442 mg/m ³	Workers	Local
DMEL	Short term Inhalation	884 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
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
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	-
2-methylpropan-1-ol	-	Fresh water	0.4 mg/l	Assessment Factors
	-	Marine water	0.04 mg/l	Assessment Factors
	-	Sewage Treatment Plant		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
ethylbenzene	-	Fresh water	0.1 mg/l	Assessment Factors
	-		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	-

8.2 Exposure controls		
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local ext or other engineering controls to keep worker exposure to airborne con any recommended or statutory limits. The engineering controls also n vapor or dust concentrations below any lower explosive limits. Use ex ventilation equipment.	taminants below eed to keep gas,
Individual protection meas	sures	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical preating, smoking and using the lavatory and at the end of the working propriate techniques should be used to remove potentially contamin Contaminated work clothing should not be allowed out of the workplace contaminated clothing before reusing. Ensure that eyewash stations a showers are close to the workstation location.	period. nated clothing. e. Wash
Eye/face protection	: Chemical splash goggles. Use eye protection according to EN 166.	
Skin protection		
Hand protection	: Chemical-resistant, impervious gloves complying with an approved sta worn at all times when handling chemical products if a risk assessmer is necessary. Considering the parameters specified by the glove man during use that the gloves are still retaining their protective properties. noted that the time to breakthrough for any glove material may be diffe glove manufacturers. In the case of mixtures, consisting of several su protection time of the gloves cannot be accurately estimated. When p frequently repeated contact may occur, a glove with a protection class (breakthrough time greater than 480 minutes according to EN 374) is	nt indicates this ufacturer, check It should be erent for different ubstances, the prolonged or of 6
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	When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use as included in the user's risk assessment.
Gloves	: butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapor (Type A) and particulate filter P3

Environmental exposure Emissions from ventilation or work process equipment should be checked to ensure 5 controls they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>							
Physical state	: Liquid.						
Color	: Various						
Odor	: Aromatic.						
Odor threshold	: Not available.						
Melting point/freezing point	 May start to solidify at the following temperature: -14°C (6.8°F) This is based on data for the following ingredient: Phenol, methylstyrenated. Weighted average: -72.87°C (-99.2°F) 						
Initial boiling point and boiling range	: >37.78°C						
Flammability	: Not available.	: Not available.					
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)						
Flash point	: Closed cup: 37°C						
Auto-ignition temperature	:						
	Ingredient name	°C	°F	Method			
	2 ,3-epoxypropyl neodecanoate	276	528.8				
Decomposition temperature pH	Stable under recommendedNot applicable. insoluble in	-	handling cond	itions (see Section 7).			
English (US)		Europe		10/18			

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SECTION 9: Physical ar	۱d	chemical pro	perties					
Viscosity	:	Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s						
Solubility(ies)	:							
Media		Result						
cold water		Not soluble						
Partition coefficient: n-octanol/ water	:	Not applicable.						
Vapor pressure	:							
			Vapo	r Press	sure at 20°C	Vapor pressure at 50°		
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		2-methylpropan-1-ol	<12	<1.6	DIN EN 13016-2			
Evaporation rate	:	Highest known valu butyl acetate	ie: 0.84 (et	hylbenz	zene) Weighte	d averag	e: 0.74co	mpared with
Relative density	:	1.59						
Vapor density	:	Highest known valu	ie: 3.7 (Aii	·= 1) ()	xylene). Weigl	hted aver	age: 3.4	(Air = 1)
Explosive properties	:	The product itself is vapor or dust with a			t the formatior	n of an ex	plosible n	nixture of
Oxidizing properties	:	Product does not pr	resent an o	oxidizing	g hazard.			
Particle characteristics								
Median particle size	:	Not applicable.						

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

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SECTION 11: Toxicological information

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

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<=1100)<>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
2,3-epoxypropyl neodecanoate	LD50 Dermal	Rat	3800 mg/kg	-
	LD50 Oral	Rat	9.6 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
•	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
1,3-bis[12-hydroxy-octadecamide-N-	LC50 Inhalation Dusts and	Rat	>5.08 mg/l	4 hours
methylene]-benzene	mists			

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

Irritation/Corrosion

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

Skin

: There are no data available on the mixture itself.

Eyes

: There are no data available on the mixture itself.

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

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Epoxy resin (MW ≤ 700)	skin	Mouse	Sensitizing

English (US)	Europe	12/18
Specific target organ tox	icity (single exposure)	
Conclusion/Summary	: There are no data available on the mixture itself.	
Teratogenicity		
Conclusion/Summary	: There are no data available on the mixture itself.	
Reproductive toxicity		
Conclusion/Summary	: There are no data available on the mixture itself.	
Carcinogenicity		
Conclusion/Summary	: There are no data available on the mixture itself.	
Mutagenicity		
Respiratory	: There are no data available on the mixture itself.	
Skin	: There are no data available on the mixture itself.	
Conclusion/Summary		

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SECTION 11: Toxicological information

Product/ingredient name			ory	Route of exposure	Target organs
xylene 2-methylpropan-1-ol			y 3 y 3 y 3	-	Respiratory tract irritation Respiratory tract irritation Narcotic effects
Specific target organ toxicit	t <u>y (repeated exposure)</u>				
Product/ingr	edient name	Catego	ory	Route of exposure	Target organs
crystalline silica, respirable p ethylbenzene	owder (<10 microns)	Categor Categor		inhalation -	- hearing organs
Aspiration hazard					•
Product/i	ngredient name				Result
xylene ethylbenzene				RATION HAZARD RATION HAZARD	
Information on the likely routes of exposure	: Not available.				
Potential acute health effect	<u>ts</u>				
Inhalation	: No known significant effe	ects or crit	cal ha	zards.	
Ingestion	: No known significant effe	ects or crit	cal ha	zards.	
Skin contact	: Causes skin irritation. D	efatting to	the sk	kin. May cause an	allergic skin reaction.
Eye contact	: Causes serious eye irrita	ition.			
Symptoms related to the ph	ysical, chemical and toxico	ological c	haract	<u>teristics</u>	
Inhalation	: No specific data.				
Ingestion	: No specific data.				
Skin contact	: Adverse symptoms may irritation redness dryness cracking	include th	e follov	wing:	
Eye contact	: Adverse symptoms may pain or irritation watering redness	include th	e follov	wing:	
Delayed and immediate effe	ects and also chronic effect	s from sh	ort ar	nd long term expo	<u>osure</u>
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 effe Not available.	ects				
Conclusion/Summary	: Not available.				
					40/40

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SECTION 11: Toxicological information

General	: May cause 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	: Suspected of causing genetic defects.
Reproductive toxicity	: No known significant effects or critical hazards.
Other information	: Not available.

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
\mathbf{E} poxy resin (MW \leq 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,3-epoxypropyl neodecanoate	Acute EC50 3.5 mg/l	Algae	96 hours
	Acute EC50 4.8 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.6 mg/l	Fish - Oncorhynchus mykiss	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
1,3-bis[12-hydroxy-octadecamide-N-methylene]- benzene	Acute LC50 >100 mg/l	Fish	96 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700) ethylbenzene	OECD 301F -	5 % - 28 days 79 % - Readily - 10 days	-	-
Conclusion/Summary	: There are no da	ata available on the mixture itse	lf.	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Epoxy resin (MW ≤ 700)	-	-	Not readily
xylene	-	-	Readily
2,3-epoxypropyl neodecanoate	-	-	Not readily
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

English (US) Europe 14	!/18
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SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
Epoxy resin (MW ≤ 700)	3	31	low
xylene	3.12	7.4 to 18.5	low
Phenol, methylstyrenated	3.627	-	low
2-methylpropan-1-ol	1	-	low
2,3-epoxypropyl neodecanoate	4.4	-	high
ethylbenzene	3.6	79.43	low

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 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product		
Methods of disposal	: The generation of waste should be avoided or minimized 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	: Yes.	
European waste catalog	ue (EWC)	
Waste code	Waste designation	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	
ackaging		
Methods of disposal	 The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 	
Type of packaging	European waste catalogue (EWC)	
Container	15 01 06 mixed packaging	

English (US)	Europe	15/18
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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)	1
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SECTION 13: Disposal considerations

Special precautions
 This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	Ш
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID	DR/RID : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.			
Tunnel code	: (D/E)			
ADN	: The product is only regulated as an environmentally hazardous substance when transported in tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.			
IMDG	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.			
IATA : None identified.				
14.6 Special pr user	ecautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.			
14.7 Maritime t bulk according instruments				

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria	
Category	
P5c	

15.2 Chemical Safety

: No Chemical Safety Assessment has been carried out.

Assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number PBT = Persistent, Bioaccumulative and Toxic vPvB = Very Persistent and Very Bioaccumulative ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway IMDG = International Maritime Dangerous Goods IATA = International Air Transport Association

Full text of abbreviated H statements

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SECTION 16: Other	information
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
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.
H341	Suspected of causing genetic defects.
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.
H413	May cause long lasting harmful effects to aquatic life.
Full text of classifications [CLP/GHS]
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - 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
Muta. 2	GERM CELL MUTAGENICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)
	Category 1
STOT DE 2	
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -
	Category 3

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Version	:	3.11

<u>Disclaimer</u>

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