SAFETY DATA SHEET

Date of issue/Date of revision

: 31 October 2022

Version : 19



Ireland

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

1.1 Product identifier

Product name	:	SIGMACOVER 456 HS HARDENER
Product code	:	00189961

Other means of identification

Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against				
Product use	: Professional applications, Used by spraying.			
Use of the substance/ mixture	: Coating.			
Uses advised against	: Product is not intended, labelled or packaged for consumer use.			

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311 Fax +32-33606435

e-mail address of person : Product.Stewardship.EMEA@ppg.com responsible for this SDS

1.4 Emergency telephone number

National advisory body/Poison Centre

National Poison Information Centre at Beaumont Hospital. Tel: +353 1 8092566, email: npicdublin@beaumont.ie <u>Supplier</u>

+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 Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

Repr. 2, H361fd STOT SE 3, H335 Aquatic Acute 1, H400

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SECTION 2: Hazards identification

Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

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

2.2 Label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of damaging fertility. Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: 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. Avoid release to the environment.
Response	: 🖉ollect spillage.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P391, P403 + P233, P501
Hazardous ingredients	 xylene Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 4-nonylphenol, branched 2-methylpropan-1-ol 3,6-diazaoctanethylenediamin
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	ents
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.2 Other hererde	

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	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

May cause endocrine disruption.

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
x ylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥10 - ≤25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
4-nonylphenol, branched	REACH #: 01-2119510715-45 EC: 284-325-5 CAS: 84852-15-3 Index: 601-053-00-8	≥5.0 - ≤10	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/ kg M [Acute] = 10 M [Chronic] = 10	[1] [3]
Poly[oxy(methyl- 1,2-ethanediyl)], α- (2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	REACH #: 01-2119557899-12 EC: 618-561-0 CAS: 9046-10-0 (n = 2-6)	≥5.0 - ≤10	Skin Corr. 1C, H314 Eye Dam. 1, H318 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	≥5.0 - ≤10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[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	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
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SECTION 3: Composition/information on ingredients

			Aquatic Chronic 3, H412		
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≥1.0 - ≤4.6	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 1716 mg/ kg ATE [Dermal] = 1465 mg/kg	[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 p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene. <u>Type</u>

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

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	:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	:	If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns.
Over-exposure signs	'symptoms

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

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SECTION 4: I	irst aid measures		
Eye contact	: Adverse symp pain watering redness	ptoms may include the following:	
Inhalation	: Adverse symp respiratory tra coughing reduced foeta increase in fo skeletal malfo	al weight etal deaths	
Skin contact	: Adverse symp pain or irritation redness dryness cracking blistering may reduced foeta increase in fo skeletal malfo	/ occur al weight etal deaths	
Ingestion	: Adverse symp stomach pain reduced foeta increase in fo skeletal malfo	ıl weight etal deaths	

4.3 Indication of any immediate 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: Firefighting measures

English (GB)	Ireland	5/19
Special precautions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the there is a fire. No action shall be taken involving any personal risk or with training. Move containers from fire area if this can be done without risk. I spray to keep fire-exposed containers cool.	out suitable
5.3 Advice for firefighters		
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides	
Hazards from the substance or mixture	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion a fire or if heated, a pressure increase will occur and the container may be risk of a subsequent explosion. This material is very toxic to aquatic life we lasting effects. Fire water contaminated with this material must be contain prevented from being discharged to any waterway, sewer or drain.	urst, with the vith long
5.2 Special hazards arising f	from the substance or mixture	
Unsuitable extinguishing media	: Do not use water jet.	
5.1 Extinguishing media Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.	
5.1 Extinguishing media		

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SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and material for	containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
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. Avoid exposure during pregnancy. 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 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

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Code : 00189961 Date of issue/Date of revision : 31 October 2022 **SIGMACOVER 456 HS HARDENER** SECTION 7: Handling and storage 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. Eating, drinking and smoking should be prohibited in areas where this material is Advice on general handled, stored and processed. Workers should wash hands and face before eating, occupational hygiene drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. 7.2 Conditions for safe Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. storage, including any 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 incompatibilities

(see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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	
Z-methylpropan-1-ol	 NAOSH (Ireland, 5/2021). [xylene] Absorbed through skin OELV-15min: 442 mg/m³ 15 minutes. OELV-15min: 100 ppm 15 minutes. OELV-8hr: 221 mg/m³ 8 hours. OELV-8hr: 50 ppm 8 hours. NAOSH (Ireland, 5/2021). OELV-15min: 225 mg/m³ 15 minutes. OELV-15min: 75 ppm 15 minutes. OELV-8hr: 150 mg/m³ 8 hours. OELV-8hr: 50 ppm 8 hours. NAOSH (Ireland, 5/2021). OELV-15min: 75 ppm 15 minutes. OELV-8hr: 50 ppm 8 hours. OELV-15min: 884 mg/m³ 15 minutes. OELV-15min: 200 ppm 15 minutes. 	n.
procedures atmosphere or the ventilation of protective equi following: Euro assessment of	OELV-8hr: 442 mg/m ³ 8 hours. OELV-8hr: 100 ppm 8 hours.	
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SECTION 8: Exposure controls/personal protection

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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English (GB) Ireland 8/19	•	DINEL	Long term Oral		General population	•
	English (GB)			Ireland		8/19

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SECTION 8: Exposure controls/personal protection

DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
DNEL	Short term Inhalation	293 mg/m ³	Workers	Local

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
xylene	-	Fresh water	0.327 mg/l	-
	-	Marine water	0.327 mg/l	-
	-	Sewage Treatment Plant	6.58 mg/l	-
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall- oil fatty acids and triethylenetetramine	-	Fresh water	0.043 mg/l	Assessment Factors
		Marine water	0 mg/l	Assessment Factors
	-	Sewage Treatment Plant	0 mg/l	Assessment Factors
	-	Fresh water sediment	434.02 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	43.4 mg/kg dwt	Equilibrium Partitioning
	-	Soil	86.78 mg/kg dwt	Equilibrium Partitioning
Poly[oxy(methyl-1,2-ethanediyl)], α-	_	Fresh water	0.015 mg/l	Assessment Factors
(2-aminomethylethyl)-ω- (2-aminomethylethoxy)-	-		0.013 mg/i	Assessment raciols
()	-	Marine water	0.014 mg/l	Assessment Factors
	-	Sewage Treatment Plant		Assessment Factors
	-	Fresh water sediment	0.132 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.125 mg/kg dwt	Equilibrium Partitioning
	-	Soil	0.018 mg/kg dwt	Equilibrium Partitioning
2-methylpropan-1-ol	-	Fresh water	0.4 mg/l	Assessment Factors
	-	Marine water	0.04 mg/l	Assessment Factors
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.156 mg/kg dwt	-
	-	Soil	0.076 mg/kg dwt	Equilibrium Partitioning
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	-

8.2 Exposure controls

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

English (GB)	Ireland	9/19

onforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)			
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SECTION 8: Exposur	e controls/personal protection		
Eye/face protection Skin protection	: Chemical splash goggles and face shield. Use eye protection according to EN 166.		
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.		
Gloves	: butyl rubber		
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.		
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3		
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some		

SECTION 9: Physical and chemical properties

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

will be necessary to reduce emissions to acceptable levels.

cases, fume scrubbers, filters or engineering modifications to the process equipment

9.1 Information on basic physical and chemical properties

English (GB)	Ireland	10/19
Initial boiling point and boiling range	: >37.78°C	
Melting point/freezing point	: May start to solidify at the following temperature: 12°C (53.6°F) data for the following ingredient: 3,6-diazaoctanethylenediamin66.29°C (-87.3°F)	
Odour threshold	: Not available.	
Odour	: Amine-like.	
Colour	: Not available.	
Physical state	: Liquid.	
Appearance		

020/070		
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SECTION 9: Physical a	ind o	chemical properties
Flammability	1 :	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: 31°C
Auto-ignition temperature	: 3	335°C (635°F)
Decomposition temperature	: :	Stable under recommended storage and handling conditions (see Section 7).
рН	1 :	Not applicable. insoluble in water.
Viscosity	: ł	Kinematic (40°C): >21 mm²/s
Viscosity	: 6	60 - 100 s (ISO 6mm)
Solubility(ies)	. :	
Media		Result
∞ old water		Not soluble

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

Vapour pressure

Vapour pressure	:							
			Vapor	Vapour Pressure at 20°C		Vapour pressure at 50°		sure at 50°C
		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	e: 0.84 (et	hylbenz	zene) Weighte	d averag	e: 0.74cc	mpared with
Relative density	:	: 0.95						
Vapour density	:	: Highest known value: 7.59 (Air = 1) (4-nonylphenol, branched). Weighted average 4.41 (Air = 1)						
Explosive properties	:	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.						
Oxidising properties	:	Product does not pr	resent an o	oxidizin	g hazard.			
Particle characteristics								
Median particle size	:	Not applicable.						
9.2 Other information								
No additional information.								

SECTION 10: Stability and reactivity

English (GB)	Ireland	11/19	
10.5 Incompatible materials	 Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. 		
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decom Refer to protective measures listed in sections 7 and 8.	position products.	
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions wil	not occur.	
10.2 Chemical stability	: The product is stable.		
10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.		

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SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

SECTION 11: Toxicological information

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

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	-
Fatty acids, C18-unsatd., dimers,	LD50 Dermal	Rat	>2000 mg/kg	-
oligomeric reaction products with tall-oil				
fatty acids and triethylenetetramine				
,	LD50 Oral	Rat	>2000 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α-	LD50 Dermal	Rat	2980 mg/kg	-
(2-aminomethylethyl)-ω-				
(2-aminomethylethoxy)-				
	LD50 Oral	Rat	2885 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/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	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Irritant	Human	-	-	-
4-nonylphenol, branched	Skin - Erythema/Eschar	Rabbit	4	-	-
2,4,6-tris(dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

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.
Sensitisation	

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine		Mouse	Sensitising
		Guinea pig	Sensitising

English (GB)	Ireland	12/19
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SECTION 11: Toxicological information

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 2-methylpropan-1-ol	Category 3 Category 3 Category 3	-	Respiratory tract irritation Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Produ	ct/ingredient name	Result		
xylene ethylbenzene		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		
Information on likely routes of exposure	: Not available.			
Potential acute health ef	fects			
Inhalation	: May cause respiratory irritation.			
Ingestion	: Corrosive to the digestive tract. Ca	auses burns.		
Skin contact	: Causes severe burns. Defatting to	Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.		
Eye contact	: Causes serious eye damage.	Causes serious eye damage.		
Symptoms related to the	physical, chemical and toxicological c	haracteristics		
Inhalation	: Adverse symptoms may include th respiratory tract irritation coughing reduced foetal weight increase in foetal deaths skeletal malformations	e following:		
Ingestion	: Adverse symptoms may include th stomach pains reduced foetal weight increase in foetal deaths skeletal malformations	e following:		

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Skin contact	•	ptoms may include the following: on y occur al weight vetal deaths	
Eye contact	: Adverse symp pain watering redness	ptoms may include the following:	
	fects as well as ch	nronic effects from short and long-term	<u>exposure</u>
Short term exposure			
Potential immediate effects	: Not available.		
Potential delayed effect	s : Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
Potential delayed effect	s : Not available.		
Potential chronic health et	f <u>fects</u>		
Not available.			
Conclusion/Summary	: Not available.		
General		repeated contact can defat the skin and le nce sensitized, a severe allergic reaction r ery low levels.	
Carcinogenicity	: No known sig	nificant effects or critical hazards.	
Mutagenicity	: No known sig	nificant effects or critical hazards.	
Reproductive toxicity	: Suspected of	damaging fertility. Suspected of damaging	g the unborn child.
Other information	: Not available.		
a			

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/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.

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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
4-nonylphenol, branched	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
Poly[oxy(methyl-1,2-ethanediyl)], α- (2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	EC50 15 mg/l	Algae	72 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
e thylbenzene	-	79 % - Readily - 10 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
x ylene	-	-	Readily
Fatty acids, C18-unsatd., dimers, oligomeric	-	-	Not readily
reaction products with tall-oil fatty acids and			
triethylenetetramine			
Poly[oxy(methyl-1,2-ethanediyl)], α-	-	-	Not readily
(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-			
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	low
4-nonylphenol, branched	5.4	251.19	low
2-methylpropan-1-ol	1	-	low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	low
ethylbenzene	3.6	79.43	low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	low

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.

English (GB)	Ireland	15/19
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SECTION 12: Ecological information

12.6 Endocrine disrupting properties

May cause endocrine disruption.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: Yes.

European waste catalogue (EWC)

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	European waste catalogue (EWC) 15 01 06 mixed packaging		
Container			
Special precautions	taken when Empty conta residues ma Do not cut, v	I 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. iners or liners may retain some product residues. Vapour from product y create a highly flammable or explosive atmosphere inside the container. veld or grind used containers unless they have been cleaned thoroughly void dispersal of spilt material and runoff and contact with soil, waterways, ewers.	

14. Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
English (Gl	I B)	Irel	and	16/19

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14. Transport information

14.4 Packing group	III		III	
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(4-nonylphenol, branched)	Not applicable.

Additional information

ADR/RID	 The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Tunnel code	: (D/E)
ADN : The environmentally hazardous substance mark is not required when transported in sizes of ≤ ≤5 kg.	
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.
IATA : The environmentally hazardous substance mark may appear if required by other transportal regulations.	
14.6 Special prec user	Exactions 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 tra	nsport in : Not applicable.

14.7 Maritime transport in : Not appl bulk according to IMO instruments

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 authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Indocrine disrupting properties for environment	4-nonylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	Candidate	ED/169/2012	12/19/2012

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)

English (GB)

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SECTION 15: Regulatory information

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category	
P5c	
E1	

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

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 2, H361fd	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

English (GB)	Ireland	18/19
H361fd	Suspected of damaging fertility. Suspected of da	amaging the unborn
H336	May cause drowsiness or dizziness.	
H335	May cause respiratory irritation.	
H332	Harmful if inhaled.	
H319	Causes serious eye irritation.	
H318	Causes serious eye damage.	
H317	May cause an allergic skin reaction.	
H315	Causes skin irritation.	
H314	Causes severe skin burns and eye damage.	
H312	Harmful in contact with skin.	
H304	May be fatal if swallowed and enters airways.	
H302	Harmful if swallowed.	
H226	Flammable liquid and vapour.	
H225	Highly flammable liquid and vapour.	

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SECTION 16: Other information	
	child.
H373	May cause damage to organs through prolonged or repeated
11400	exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Full text of classifications [CLP/GHS]	
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

<u>History</u>

STOT SE 3

Date of issue/ Date of revision	: 31 October 2022
Date of previous issue	: 7 November 2021
Prepared by	: EHS
Version	: 19

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Category 2

Category 3

SPEČIFÍC TARGET ORGAN TOXICITY - SINGLE EXPOSURE -