SAFETY DATA SHEET

Date of issue/Date of revision

: 7 November 2024 Version



: 1.06

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

1.1 Product identifier	
Product name	: SIGMACOVER 350 HARDENER
Product code	: 000001172489
Other means of identification	on
00220294; 00272755; 00480	544
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	: Hardener.
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 Protective and Marine C 7 Arnold Street.	oatings Pty Ltd
Alrode, Alberton, Gauteng	
South Africa	
Tel: 0027 11 389 4800	
a mail address of some	
e-mail address of person responsible for this SDS	: PS.ACEMEA@ppg.com
1.4 Emergency telephone	: +27 (0)861 555 777

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. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411

number

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.



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SECTION 2: Hazards identification

haentineation
 Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
: 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.
: Collect spillage.
: Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P391, P403 + P233, P501
: Not applicable.
: Not applicable.
nents
: Not applicable.
: Not applicable.
: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
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	≥25 - ≤50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
Amides, from C18-unsatd. fatty acid dimers, tall-oil fatty acids and	CAS: 68953-09-3	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]
	1	English	GB) Souti	n Africa	2/16

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SECTION 3: Compo	sition/informat	tion on ir	ngredients			
triethylenetetramine, reaction products with bisphenol A- epichlorohydrin polymer						
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]	
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥10 - <20	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]	
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/ kg	[1] [2]	
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥5.0 - ≤10	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 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]	
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≥1.0 - <5.0	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] [2]	

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.

[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.

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SECTION 4: First aid measures

4.1 Description of first aid m	easures
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 effects 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 : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Ingestion : Adverse symptoms may include the following: respiratory acking bilstering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	4.2 wost important symp	toms and effects, both acute and delayed
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 Eye contact : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Potential acute health e	ffects
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 Eye contact : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Eye contact	: Causes serious eye damage.
Ingestion : Corrosive to the digestive tract. Causes burns. Over-exposure signs/symptoms Eye contact : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Inhalation	: May cause respiratory irritation.
Over-exposure signs/symptoms Eye contact : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Eye contact : Adverse symptoms may include the following: pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur 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.	Ingestion	: Corrosive to the digestive tract. Causes burns.
pain watering redness pain watering redness Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing Skin contact : Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Over-exposure signs/sy	r <u>mptoms</u>
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pain or irritation redness dryness cracking blistering may occur Ingestion : Adverse symptoms may include the following: stomach pains 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.	Inhalation	respiratory tract irritation
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.	Skin contact	pain or irritation redness dryness cracking
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.	Ingestion	
The exposed person may need to be kept under medical surveillance for 48 hours.	4.3 Indication of any imm	ediate medical attention and special treatment needed
Specific treatments : No specific treatment.	Notes to physician	
	Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

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

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SECTION 5: Firefighting measures

U	
5.2 Special hazards arising fi	rom 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 toxic 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
5.3 Advice for firefighters	
Special precautions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	ctive equipment and emergency proced	dures	
For non-emergency personnel	:	lo action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from intering. Do not touch or walk through spilt material. Shut off all ignition sources. No ares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide dequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put in appropriate personal protective equipment.		
For emergency responders	:	If specialised clothing is required to deal s Section 8 on suitable and unsuitable mate emergency personnel".		
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runot sewers. Inform the relevant authorities if pollution (sewers, waterways, soil or air). the environment if released in large quan	the product has caused environmenta Water polluting material. May be harr	I
6.3 Methods and material for	со	ntainment and cleaning up		
Small spill	:	Stop leak if without risk. Move containers explosion-proof equipment. Dilute with w or if water-insoluble, absorb with an inert disposal container. Dispose of via a licer	ater and mop up if water-soluble. Alte dry material and place in an appropria	rnatively,
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 an 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.		nto ffluent earth and censed
6.4 Reference to other sections	:	See Section 1 for emergency contact info See Section 8 for information on appropri See Section 13 for additional waste treat	iate personal protective equipment.	
		English (GB)	South Africa	5/16

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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

: 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.
Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
: 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.
: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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

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Broduct/ingrodient nome	Expediuse limit valu	

Product/ingredient name	Exposure limit values
xylene	DOL OEL (South Africa, 3/2021) [xylene, o-, m-, p- or mixed
	isomers] Absorbed through skin.
	TWA 8 hours: 200 ppm.
	STEL 15 minutes: 300 ppm.
2-methylpropan-1-ol	DOL OEL (South Africa, 3/2021)
	TWA 8 hours: 100 ppm.
ethylbenzene	DOL OEL (South Africa, 3/2021) CARC. Absorbed through skin. TWA 8 hours: 40 ppm.

Biological exposure indices

	t name	_	xposure indices	
xylene		DOL BEI (South Africa, 3 , BEI: 1.5 g/g creatinine, m end of shift.	/ 2021) [xylenes] ethylhippuric acid [in urine]. Samp	oling time:
ethylbenzene		DOL BEI (South Africa, 3 BEI: 0.15 g/g creatinine, s acid [in urine]. Sampling tir	sum of mandelic acid and phenylg	lyoxylic
Recommended monitoring procedures	Standard EN 689 by inhalation to c strategy) Europe application and u biological agents requirements for agents) Referen	 Workplace atmospheres - themical agents for comparise an Standard EN 14042 (Wo use of procedures for the asset) European Standard EN 48 the performance of procedu 	ndards, such as the following: Eu Guidance for the assessment of son with limit values and measure orkplace atmospheres - Guide for sessment of exposure to chemica 32 (Workplace atmospheres - Gen ures for the measurement of chem uments for methods for the deterr d.	exposure ment the I and neral nical
2 Exposure controls				
ontrols	other engineering	g controls to keep worker ex r statutory limits. The engine oncentrations below any low	cess enclosures, local exhaust ve posure to airborne contaminants eering controls also need to keep er explosive limits. Use explosior	below any gas,
ndividual protection measure				
Hygiene measures	eating, smoking Appropriate tech Contaminated we contaminated clo	and using the lavatory and a niques should be used to re ork clothing should not be al	after handling chemical products, it the end of the working period. move potentially contaminated clo lowed out of the workplace. Was re that eyewash stations and safe n.	othing. h
Eye/face protection <u>Skin protection</u>	: Chemical splash	goggles and face shield.		
Hand protection	worn at all times necessary. Cons during use that th noted that the tim glove manufactu protection time o frequently repeat (breakthrough tim When only brief o (breakthrough tim	when handling chemical pro- sidering the parameters spe- ne gloves are still retaining the ne to breakthrough for any g- rers. In the case of mixtures f the gloves cannot be accur- ted contact may occur, a glo ne greater than 480 minutes contact is expected, a glove ne greater than 30 minutes a	lying with an approved standard s oducts if a risk assessment indicat cified by the glove manufacturer, heir protective properties. It shoul love material may be different for s, consisting of several substance rately estimated. When prolonged ve with a protection class of 6 according to EN 374) is recomme with a protection class of 2 or hig according to EN 374) is recomme type of glove selected for handling	tes this is check ld be different es, the d or ended. her nded.

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		product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Gloves	1	nitrile neoprene
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection		Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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

9.1 Information on basic physic	ai and chemical properties
Appearance	
Physical state	: Liquid.
Colour	: Colourless.
Odour	: Amine-like.
Odour threshold	: Not available.
Melting point/freezing point	: Not determined.
Initial boiling point and boiling range	: >37.78°C
Flammability	: Not determined. There are no data available on the mixture itself.
Upper/lower flammability or explosive limits	: Not available.
Flash point	: Closed cup: 31°C
Auto-ignition temperature	: 335°C (635°F)
Decomposition temperature	: Stable under recommended storage and handling conditions (see Section 7).
рН	: Not applicable. insoluble in water.
Viscosity	 Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): >21 mm²/s
Solubility(ies)	: · · · · · · · · · · · · · · · · · · ·

Media	Result
cold water	Not soluble
Partition coefficient: n-octanol/ : water	Not applicable.
Vapour pressure :	

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SECTION 9: Physical and chemical properties

	La constitución de la constitución de	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	<12.00102	<1.6	DIN EN 13016-2			
Relative density	: 0.95			•			
Explosive properties	: The product itself is vapour or dust with a	•		t the formation	of an ex	olosible n	nixture of
Oxidising properties	: Product does not pre	esent an o	xidizing	j 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: oxidising agents, strong alkalis, strong acids.			
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds			

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	LD50 Dermal	Rat	>2000 mg/kg	-
fatty acids and triethylenetetramine		Det	>2000 mg/kg	
undana.	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>5 mg/l	4 hours
	mists		U U	
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rat	1280 mg/kg	-
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LD50 Oral	Rat	1200 mg/kg	-
LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
LD50 Dermal	Rabbit	17.8 g/kg	-
LD50 Oral	Rat	3.5 g/kg	-
LD50 Dermal	Rabbit	1465 mg/kg	-
LD50 Oral	Rat	1716 mg/kg	-
	LC50 Inhalation Vapour LD50 Dermal LD50 Oral LD50 Dermal	LC50 Inhalation VapourRatLD50 DermalRabbitLD50 OralRatLD50 DermalRabbit	LC50 Inhalation VapourRat17.8 mg/lLD50 DermalRabbit17.8 g/kgLD50 OralRat3.5 g/kgLD50 DermalRabbit1465 mg/kg

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
xylene	Skin - Irritant Skin - Moderate irritant	Human Rabbit	-	- 24 hours 500 mg	-

Conclusion/Summary

- Skin : There are no data available on the mixture itself.
 - : There are no data available on the mixture itself.
- Eyes 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	skin	Mouse	Sensitising
3,6-diazaoctanethylenediamin	skin	Guinea pig	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 toxi	<u>city (single exposure)</u>

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

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Product/ingredient name Result				
xylene ethylbenzene		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		
Information on likely routes of exposure	: Not available.			
Potential acute health effect	<u>ts</u>			
Inhalation	: May cause respiratory irritation	on.		
Ingestion	: Corrosive to the digestive tra	ct. Causes burns.		
Skin contact	: Causes severe burns. Defat	ting to the skin. May cause an allergic skin reaction.		
Eye contact	: Causes serious eye damage.			
Symptoms related to the ph	vsical, chemical and toxicolog	ical characteristics		
Inhalation	: Adverse symptoms may inclu respiratory tract irritation coughing	ude the following:		
Ingestion	: Adverse symptoms may inclusion stomach pains	ude the following:		
Skin contact	: Adverse symptoms may inclu pain or irritation redness dryness cracking blistering may occur	ude the following:		
Eye contact	: Adverse symptoms may inclu pain watering redness	ude the following:		
Delayed and immediate effe	ects as well as chronic effects f	rom short and long-term exposure		
Short term exposure				
Potential immediate effects	: Not available.			
Potential delayed effects Long term exposure	: Not available.			
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Potential chronic health effe	<u>ects</u>			
Not available.				
Conclusion/Summary	: Not available.			
General	: Prolonged or repeated contact	ct can defat the skin and lead to irritation, cracking and/or a severe allergic reaction may occur when subsequently		
Carcinogenicity	: No known significant effects	or critical hazards.		
Mutagenicity	: No known significant effects	or critical hazards.		
Reproductive toxicity	: No known significant effects	or critical hazards.		
Other information	: Not available.			

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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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

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
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 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 >100 mg/l Acute LC50 >100 mg/l	Daphnia Fish	48 hours 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
2,4,6-tris (dimethylaminomethyl)phenol	Ready Biodegradability -	4 % - Not readily - 28 days	-	-
ethylbenzene	Closed Bottle Test -	79 % - Readily - 10 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
2,4,6-tris(dimethylaminomethyl)phenol	-	-	Not readily
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

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Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
benzyl alcohol	0.87	-	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	: Not available.
coefficient (Koc)	
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

<u>Product</u>	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: 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)	
Container	15 01 06	mixed packaging

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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. Vapour 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 spilt material and runoff and contact with soil, waterway drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)
14.4 Packing group		Ш	
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide)	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)
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions 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 Transport in bulk	: Not applicable.
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

None of the components are listed.

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SECTION 15: Regula	atory information			
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.			
Other national and internat	tional regulations.			
Explosive precursors Ozone depleting substance Not listed.	: Not applicable. :es (1005/2009/EU)			
15.2 Chemical safety assessment	: No Chemical Safety A	ssessment has been carried	out.	
SECTION 16: Other	information			
Indicates information that	has changed from previou	sly issued version.		
Abbreviations and acronyms	1272/2008] DNEL = Derived No E EUH statement = CLI	Labelling and Packaging Reg Effect Level P-specific Hazard statement Deffect Concentration	gulation [Regulation (EC) No.
Full text of abbreviated H statements	H226FlammableH302Harmful if sH304May be fataH312Harmful in oH314Causes sevH315Causes sevH317May causeH318Causes serH319Causes serH32Harmful if irH335May causeH336May causeH373May causeH374Harmful if irH375Harmful if irH376Hay causeH377Hay causeH378Harmful if irH379Harmful if irH376Hay causeH411Toxic to aquH412Harmful to a	I if swallowed and enters airv contact with skin. vere skin burns and eye dama n irritation. an allergic skin reaction. ious eye damage. ious eye irritation. haled. respiratory irritation. drowsiness or dizziness. damage to organs through pu uatic life with long lasting effe aquatic life with long lasting e	age. rolonged or repeated ects. iffects.	exposure.
Full text of classifications [CLP/GHS]	: Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Corr. 1B Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B STOT RE 2	ACUTE TOXICITY - C LONG-TERM (CHRON ASPIRATION HAZARI SERIOUS EYE DAMA SERIOUS EYE DAMA FLAMMABLE LIQUIDS FLAMMABLE LIQUIDS SKIN CORROSION/IR SKIN CORROSION/IR SKIN SENSITISATION SKIN SENSITISATION SKIN SENSITISATION SKIN SENSITISATION SKIN SENSITISATION SKIN SENSITISATION SPECIFIC TARGET O EXPOSURE - Categor SPECIFIC TARGET O	NIC) AQUATIC HAZA NIC) AQUATIC HAZA O - Category 1 GE/EYE IRRITATION GE/EYE IRRITATION S - Category 2 S - Category 3 RITATION - Categor RITATION - Categor RITATION - Categor I - Category 1 J - Category	NRD - Category 3 N - Category 1 N - Category 2 y 1B y 1C y 2 REPEATED

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SECTION 16: Other information

EXPOSURE - Category 3

<u>History</u>	
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Date of previous issue	: 9 October 2024
Prepared by	: EHS
Version	: 1.06

<u>Disclaimer</u>

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