SAFETY DATA SHEET

Date of issue/Date of revision

: 6 June 2023

Version

: 2



SECTION 1: Identification of the substance/mixture and of the company/ undertaking **1.1 Product identifier Product name** : PITT-CHAR XP HARDENER BLACK PF **Product code** : 000001104813 Other means of identification 00352602; 00354399 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/ : Coating. mixture : Product is not intended, labelled or packaged for consumer use. Uses advised against 1.3 Details of the supplier of the safety data sheet Sigma Coatings PTY 9 Arnold Street, Alrode, Alberton, Gauteng South Africa Tel: 0027 11 389 4800 e-mail address of person : PS.ACEMEA@ppg.com responsible for this SDS **1.4 Emergency telephone** : +27 51 444 2134 number

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] Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373 Aquatic Chronic 2, H411 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

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PITT-CHAR XP HARDENER BLACK PF			
SECTION 2: Hazards	identification		
Hazard pictograms			
Signal word	: Danger	• • •	
Hazard statements	May cause an alle Suspected of cau Suspected of dan May cause damag		exposure.
Precautionary statements			
Prevention		gloves, protective clothing and eye or face pr Do not breathe vapour.	otection. Avoid release to
Response	: 🖉 ollect spillage. I	IF INHALED: Immediately call a POISON CE	ENTER or doctor.
Storage	: Not applicable.		
Disposal	international regu	nts and container in accordance with all loca lations. 0, P391, P304 + P310, P501	l, regional, national and
Hazardous ingredients	and triethylenetetr 1,3,5-triazine-2,4, 2,4,6-tris(dimethy 3,6-diazaoctaneth	,6-triamine /laminomethyl)phenol	s with tall-oil fatty acids
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 requiren	<u>nents</u>		
Containers to be fitted with child-resistant fastenings	: Not applicable.		
Tactile warning of danger	: Not applicable.		
2.3 Other hazards			
Product meets the criteria for PBT or vPvB	: This mixture does	s not contain any substances that are assess	sed to be a PBT or a vPvE
Other hazards which do not result in classification	: Causes digestive	tract burns.	

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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]
1,3,5-triazine-2,4,6-triamine	REACH #: 01-2119485947-16 EC: 203-615-4 CAS: 108-78-1 Index: 613-345-00-2	≥10 - ≤25	Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373 (urinary system)	-	[1]
4,4'-Isopropylidenediphenol, ethoxylated	EC: polymer CAS: 32492-61-8 (EO> 4.5 moles)	≥5.0 - ≤10	Aquatic Chronic 3, H412	-	[1]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥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]
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	ATE [Oral] = 1716 mg/ kg ATE [Dermal] = 1465 mg/kg	[1] [2]
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	REACH #: 01-2119978265-26 EC: 204-613-6 CAS: 123-26-2	<1.0	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1] [2]
			See Section 16 for the full text of the H statements declared above.		

There are no 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 e	ffects
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns.
Over-exposure signs/sy	mptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	 Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations
4.3 Indication of any imm	ediate 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

5.1 Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
5.2 Special hazards arising f	rom the substance or mixture
Hazards from the substance or mixture	: In a fire or if heated, a pressure increase will occur and the container may burst. 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 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.
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

		English (GB)	South Africa	5/15
Large spill	:	Stop leak if without risk. Move container upwind. Prevent entry into sewers, wate spillages into an effluent treatment plant spillage with non-combustible, absorbent diatomaceous earth and place in contain Dispose of via a licensed waste disposal may pose the same hazard as the spilt p	r courses, basements or confine or proceed as follows. Contain t material e.g. sand, earth, verm er for disposal according to loca contractor. Contaminated abso	ed areas. Wash and collect iculite or Il regulations.
Small spill	:	Stop leak if without risk. Move container if water-soluble. Alternatively, or if water place in an appropriate waste disposal co disposal contractor.	-insoluble, absorb with an inert o	dry material and
6.3 Methods and material for		• •		
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runo sewers. Inform the relevant authorities if pollution (sewers, waterways, soil or air). the environment if released in large quar	f the product has caused enviror Water polluting material. May	mental
For emergency responders	:	If specialised clothing is required to deal Section 8 on suitable and unsuitable mat emergency personnel".		
For non-emergency personnel	:	No action shall be taken involving any per Evacuate surrounding areas. Keep unner entering. Do not touch or walk through s Provide adequate ventilation. Wear apprina inadequate. Put on appropriate personal	ecessary and unprotected perso pilt material. Do not breathe va ropriate respirator when ventilati	nnel from pour or mist.
6.1 Personal precautions, pro	ote	ctive equipment and emergency proce	dures	

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SECTION 6: Accidental release measures

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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	: Fut 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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.
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 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. 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
gfass, oxide, chemicals	DOL OEL (South Africa, 3/2021). [synthetic vitreous fibres [SVF]: continuous filament glass fibres] TWA: 2 f/ml 8 hours. Form: Respirable fibres: length> 5 µm; aspect ratio ≥ 3:1 as determined by the membrane filter method at 400-450X magnification (4mm objective), using phase-contrast illumination. TWA: 10 mg/m ³ 8 hours.

2020/878	
Code : 00000110481:	
PITT-CHAR XP HARDENER E Recommended monitoring 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.
8.2 Exposure controls	
Appropriate engineering controls	 If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Individual protection measu	<u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection <u>Skin protection</u>	: Chemical splash goggles and face shield.
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	: pítrile 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.
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.

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SECTION 9: Physical and chemical properties

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

Appearance Physical state : Liquid. Colour : Black. Odour threshold : Not available. Metting point/freezing point : May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3.6-diazaoctanethylenediamin. Weighted average55.6°C (68.1°F) Initial boiling point and boiling point and p	9.1 Information on basic physical	and chemical prope	rties					
Colour : Black. Odour : Amine-like. [Strong] Odour threshold : Not available. Melting point/freezing point : May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3.6-diazaoctanethylenediamin. Weighted average -55.6°C (-68.1°F) Initial boiling point and boiling range : >37.78°C Flammability : Not available. Upper/lower flammability or explosive limits : Closed cup: 120°C Flash point : Closed cup: 120°C Auto-ignition temperature : Stable under recommended storage and handling conditions (see Section 7). pH H : Not applicable. insoluble in water. Viscosity : Xinematic (40°C): >21 mm²/s Viscosity : Xinematic (40°C): >21 mm²/s Viscosity : Not applicable. Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C (mm Hg kPa Method KPa Method KPa Method kenerol Vapour pressure : Not available. Evaporation rate : Not available. Relative	<u>Appearance</u>							
Odour : Amine-like. [Strong] Odour threshold : Not available. Melting point/freezing point : May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average -55.6°C (-68.1°F) Initial boiling point and boiling range : >37.78°C Flammability : Not available. Upper/lower flammability or scylosive limits : Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin) axplosive limits Flash point : Closed cup: 120°C Auto-Ignition temperature : Stable under recommended storage and handling conditions (see Section 7). pH : Not applicable. insoluble in water. Viscosity : > 100 s (ISO 6 mm) Partition coefficient: n-octanol/ : Not applicable. Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure : Retive density : 1.14 Vapour density : 1.14 Vapour density : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising pro	Physical state	: Liquid.						
Odour threshold : Not available. Melting point/freezing point : May start to solidify at the following imperature: 12°C (53.6°F) This is based on character is the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average -55.6°C (-68.1°F) Initial boiling point and boiling range : >37.78°C Deboiling range : Start a solidify at the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average -55.6°C (-68.1°F) Flammability : Not available. Upper/lower flammability or explosive limits : Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin) Flam nability : Not available. Upper/lower flammability or explosive limits : Closed cup: 120°C Auto-ignition temperature : Closed cup: 120°C Auto-ignition temperature : Stable under recommended storage and handling conditions (see Section 7). PH : Not applicable. Viscosity : Kinematic (40°C): >21 mm²/s Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ : Not available. Vapour pressure : Ingredient name water Vapour pressure : Not available. Relative density : 1.14 Vapour pressure : Not available. Relative density :	Colour	: Black.						
Melting point/freezing point : May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average -55.6°C (-68.1°F). Initial boiling point and boiling range : >37.78°C Flammability : Not available. Upper/lower flammability or explosive limits : Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin) Flash point : Closed cup: 120°C Auto-ignition temperature : Stable under recommended storage and handling conditions (see Section 7). pH : Stable under recommended storage and handling conditions (see Section 7). viscosity : Kinematic (40°C): >21 mm²/s Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ : Not applicable. Vapour pressure : Ingredient name	Odour	: Amine-like. [Strong]]					
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boiling range Flammability : Not available. Upper/lower flammability or explosive limits : Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin) explosive limits Flash point : Closed cup: 120°C Auto-ignition temperature : Ingredient name °C °F Method Ø [*] -diazaoctanethylenediamin 337.78 640 0 Decomposition temperature : Stable under recommended storage and handling conditions (see Section 7). PH : Not applicable. insoluble in water. Viscosity : Kinematic (40°C): >21 mm²/s : Not applicable. : Not applicable. Viscosity : Voit applicable. : Not applicable. : Not applicable. Vapour pressure : Not applicable. : Not applicable. : Not applicable. Vapour pressure : Not available. : Not available. : Not available. Evaporation rate : Not available. : 1.14 : Not available. Yapour density : 1.14 : Not available. : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising properties : Product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.	Melting point/freezing point	data for the followin						
Upper/lower flammability or explosive limits : Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin) Flash point : Closed cup: 120°C Auto-ignition temperature : Ingredient name °C °F Method R6-diazaoctanethylenediamin 337.78 640 Decomposition temperature : Stable under recommended storage and handling conditions (see Section 7). pH : Not applicable. insoluble in water. Viscosity : Kinematic (40°C): >21 mm²/s Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ : Not applicable. vapour pressure : Ingredient name Vapour density <td></td> <td>: >37.78°C</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		: >37.78°C						
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Important of the state of	Flash point	: Closed cup: 120°C						
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pH : Not applicable. insoluble in water. Viscosity : Kinematic (40°C): >21 mm²/s Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ water : Not applicable. Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Vapour pressure : Ingredient name Wath of the second								
Viscosity : Kinematic (40°C): >21 mm²/s Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ water : Not applicable. Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Evaporation rate : Not available. . . Evaporation rate : Not available. . Relative density : 1.14 . Vapour density : 1.14 . Vapour or dust with air is possible. . . Oxidising properties : Product does not present an oxidizing hazard. article characteristics . . Median particle size : . .2 Other information .	Decomposition temperature	: Stable under recom	nmended st	orage ar	nd handling	conditions	s (see Sec	tion 7).
Viscosity : > 100 s (ISO 6mm) Partition coefficient: n-octanol/ : Not applicable. Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Evaporation rate : Not available. : Ingredient name Wapour density : I.14 Vapour density : 1.14 : Not available. : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. : The product idself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising properties : Product does not present an oxidizing hazard. article characteristics : Mot applicable. 2 Other information : Not applicable.	pH	••		ter.				
Partition coefficient: n-octanol/ : Not applicable. Water Vapour pressure : Ingredient name Vapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Wapour pressure : Ingredient name Wapour Pressure at 20°C Vapour pressure at 50°C Evaporation rate : Not available. : Ingredient value : Ingredient value : Ingredient value Evaporation rate : Not available. : Ingredient value : Ingredient value : Ingredient value : Ingredient value Evaporation rate : Not available. : Ingredient value : Ingredient value <th< td=""><td>Viscosity</td><td>: Kinematic (40°C): ></td><td>>21 mm²/s</td><td></td><td></td><td></td><td></td><td></td></th<>	Viscosity	: Kinematic (40°C): >	>21 mm²/s					
water Vapour pressure Image: Ima	Viscosity	: > 100 s (ISO 6mm))					
Ingredient name Imgredient name		: Not applicable.						
Imm Hg KPa Method mm KPa Method P4,6-tris 0.056 0.0075 EU A.4 1 1 Evaporation rate : Not available. : 1.14 Vapour density : 1.14 : : 1.14 Vapour density : Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). : : Explosive properties : Product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. : Product does not present an oxidizing hazard. Particle characteristics : Mot applicable. : . .2 Other information : : . .	Vapour pressure		Vapour Pressure at 20°C Vap			our pres	sure at 50°C	
Evaporation rate : Not available. Relative density : 1.14 Vapour density : Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising properties : Product does not present an oxidizing hazard. Particle characteristics : Not applicable. .2 Other information : Not applicable.		Ingredient name	mm Hg	kPa	Method		kPa	Method
Relative density : 1.14 Vapour density : Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising properties : Product does not present an oxidizing hazard. Particle characteristics : Mot applicable. .2 Other information : Mot applicable.		(dimethylaminomethyl)	0.056	0.0075	EU A.4			
 Vapour density Explosive properties Oxidising properties Product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Product does not present an oxidizing hazard. Article characteristics Median particle size Mot applicable. 	Evaporation rate	: Not available.						
Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. Oxidising properties : Product does not present an oxidizing hazard. article characteristics : Mot applicable. 2 Other information : Mot applicable.	Relative density	: 1.14						
Oxidising properties : Product does not present an oxidizing hazard. article characteristics . Median particle size : Not applicable. .2 Other information .	Vapour density	: Highest known valu	ie: 5.04 (A	ir = 1) (3	3,6-diazaoct	anethylen	ediamin).	
Varticle characteristics Median particle size .2 Other information	Explosive properties	•		,	the formation	on of an ex	cplosible n	nixture of
Median particle size : Not applicable. .2 Other information		: Product does not p	resent an o	xidizing l	hazard.			
.2 Other information								
	Median particle size	: Not applicable.						
	.2 Other information							

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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 metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
melamine	LC50 Inhalation Dusts and mists	Rat	>5190 mg/m ³	4 hours
	LD50 Oral	Rat	3161 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	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-
N,N'-ethane-1,2-diylbis	LC50 Inhalation Dusts and	Rat	>5.11 mg/l	4 hours
(12-hydroxyoctadecan-1-amide)	mists			
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
✓atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Irritant	Human	-	-	-
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			

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

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		1		
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-diazaoctanethylenedia	min	skin	Guinea pig	Sensitising
Conclusion/Summary				
Skin	: There are no data avail	lable on the mixtur	e itself.	
Respiratory	: There are no data avail	lable on the mixtur	e itself.	
<u>Mutagenicity</u>				
Conclusion/Summary	: There are no data avail	lable on the mixtur	e itself.	
Carcinogenicity				
Conclusion/Summary	: There are no data avail	lable on the mixtur	e itself.	
Reproductive toxicity				
Conclusion/Summary	: There are no data avail	lable on the mixtur	e itself.	
Teratogenicity				
Conclusion/Summary	: There are no data avail	lable on the mixtur	e itself.	
Specific target organ toxi	<u>icity (single exposure)</u>			
Not available.				

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
₮,3,5-triazine-2,4,6-triamine	Category 2	-	urinary system

Aspiration hazard

Not available.

Information on likely : Not available.

routes of exposure
Potential acute health effects

i otentiai acute neatti	
Inhalation	: No known significant effects or critical hazards.
Ingestion	: Corrosive to the digestive tract. Causes burns.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Eye contact	: Causes serious eye damage.
Symptoms related to the	ne physical, chemical and toxicological characteristics
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

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SECTION 11: Toxicol	oç	jical information
Eye contact		Adverse symptoms may include the following: pain watering redness
Delayed and immediate effe	<u>cts</u>	as well as chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ects	
Not available.		
Conclusion/Summary	:	Not available.
General	:	May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity		Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging fertility.
Other information	:	Not available.

Causes digestive tract burns. 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 vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death.

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
melamine	Acute EC50 200 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-	Acute EC50 29 to 43 mg/l	Algae -	72 hours
1-amide)		Pseudokirchneriella	
		subcapitata	
	Acute EC50 94 mg/l	Daphnia - Daphnia	48 hours
		magna	

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

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SECTION 12: Ecological information

Product/ingredient name	Test	Result		Dose	Inoculum
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	-	63 % - 28 days		-	-
Conclusion/Summary	: There are no da	ita available on the mixtu	re itself.		
Product/ingredient name		Aquatic half-life	Photo	olysis	Biodegradability
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)		-	-		Not readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
 3,5-triazine-2,4,6-triamine 4,6-tris(dimethylaminomethyl)phenol 6-diazaoctanethylenediamin N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide) 	-1.22 0.219 -1.66 to -1.4 >6	3.8 - - -	low low low high

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 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	: The classification of the product may meet the criteria for a hazardous waste.
European waste catalog	ue (EWC)

English (GB)

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SECTION 13: Disposal considerations

Waste code	Waste designation
Ø 8 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
Packaging	- <u>-</u>
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		
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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.		

SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN3066	UN3066	UN3066
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	M	M	W
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	DR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.		
Tunnel code	(E)		
IMDG	The marine pollutant mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.		
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.		
14.6 Special pre- user	tions 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 according to IM0 instruments	ulk : Not applicable.		

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

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV - List of substances subject to authorisation
Annex XIV
None of the components are listed.
Substances of very high concern
None of the components are listed.
Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Other national and international regulations.
Ozone depleting substances (1005/2009/EU)
Not listed.
15.2 Chemical safety : No Chemical Safety Assessment has been carried out. assessment

SECTION 16: Other information

Indicates information that I	has changed from previously	issued version.		
Abbreviations and acronyms	: ATE = Acute Toxicity Es CLP = Classification, Lal 1272/2008] DNEL = Derived No Effe EUH statement = CLP-s PNEC = Predicted No Effe RRN = REACH Registra	belling and Packag ect Level pecific Hazard stat ffect Concentration		EC) No.
Full text of abbreviated H statements	H315Causes skin irH317May cause anH318Causes seriouH351Suspected of cH361fSuspected of cH373May cause darH411Toxic to aquat	tact with skin. e skin burns and ey ritation. allergic skin reactions s eye damage. causing cancer. damaging fertility.	on. ough prolonged or repeated ing effects.	exposure.
Full text of classifications [CLP/GHS]	Cute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Carc. 2 Eye Dam. 1 Repr. 2 Skin Corr. 1B Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B STOT RE 2	ACUTE TOXIC LONG-TERM (LONG-TERM (CARCINOGEN SERIOUS EYE REPRODUCTI SKIN CORROS SKIN CORROS SKIN CORROS SKIN SENSITIS SKIN SENSITIS SKIN SENSITIS	ITY - Category 4 CHRONIC) AQUATIC HAZA CHRONIC) AQUATIC HAZA ICITY - Category 2 DAMAGE/EYE IRRITATION VE TOXICITY - Category 2 SION/IRRITATION - Categor SION/IRRITATION - Categor SION/IRRITATION - Categor SATION - Category 1 SATION - Category 1A SATION - Category 1B SATION - Category 1B SATION - Category 1B	RD - Category 3 N - Category 1 y 1B y 1C y 2
	Eng	lish (GB)	South Africa	14/15

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SECTION 16: Other information

<u>History</u>	
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Date of previous issue	: 23 June 2022
Prepared by	: EHS
Version	: 2

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