SAFETY DATA SHEET

: 5 August 2024

Version

: 1.03



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

1.1 Product identifier	
Product name	: SIGMALINE 2500 HARDENER
Product code	: 000001021601
Other means of identifica	tion
	00070
00195815; 00319119; 0042	
	s of the substance or mixture and uses advised against
1.2 Relevant identified use Product use	 s of the substance or mixture and uses advised against Professional applications, Used by spraying.
1.2 Relevant identified use	s of the substance or mixture and uses advised against

Date of issue/Date of revision

PPG Protective and Marine Coatings Pty Ltd 7 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 (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]

Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361d 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.

2.2 Label elements

Code : 000001021601 SIGMALINE 2500 HARDENEF	5
SECTION 2: Hazards	identification
Hazard pictograms	
Hazard statements	 Danger Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging the unborn child. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment.
Response	: Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Storage	: Not applicable.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P273, P391, P304 + P310, P301 + P310, P501
Hazardous ingredients	 bicyclo[2.2.1]heptanebis(methylamine) benzyl alcohol salicylic acid N-(3-(trimethoxysilyl)propyl)ethylenediamine
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	<u>ients</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 not contain any substances that are assessed to be a PBT or a vPvI
Other hazards which do not result in classification	: Causes digestive tract burns.

Code : 000001021601 SIGMALINE 2500 HARDENER Date of issue/Date of revision

: 5 August 2024

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
ofcyclo[2.2.1]heptanebis (methylamine)	EC: 260-280-7 CAS: 56602-77-8	≥50 - ≤75	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	ATE [Oral] = 500 mg/ kg	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥25 - ≤50	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 1230 mg/ kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1] [2]
Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol	CAS: 445498-00-0	≥1.0 - ≤5.0	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/ kg M [Acute] = 1 M [Chronic] = 1	[1]
salicylic acid	REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5	≥1.0 - ≤5.0	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d	ATE [Oral] = 891 mg/ kg	[1]
N-(3-(trimethoxysilyl)propyl) ethylenediamine	EC: 217-164-6 CAS: 1760-24-3	≥1.0 - ≤5.0	Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 3, H335	-	[1]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥1.0 - ≤3.5	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 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.

[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.

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.		

Conforms to 2020/878	Regulation (EC) No	. 1907/2006 (REACH), Annex II, as amended by Commission	n Regulation (EU)
Code	000004024604	Data of issue/Data of revision	E August 2024

Code : 000001021601	Date of issue/Date of revision	: 5 August 2024
SIGMALINE 2500 HARDENER		

SECTION 4: First aid measures

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 sympton	ms and effects, both acute and delayed	
Potential acute health effect	<u>cts</u>	
Eye contact	: Causes serious eye damage.	
Inhalation	: Harmful if inhaled.	
Skin contact	: Causes severe burns. May cause an allergic skin reaction.	
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.	
Over-exposure signs/symp	<u>otoms</u>	
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 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

5.1 Extinguishing media		
Suitable extinguishing media	Use an extinguishing agent suitable for the surroundin	g fire.
Unsuitable extinguishing media	None known.	

5.2 Special hazards arising from the substance or mixture

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

Code	: 000001021601	Date of issue/Date of revision	: 5 August 2024
SIGMALINE	2500 HARDENER		

SECTION 5: Firefighting measures

CECTION C. Thongin	
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 Formaldehyde.
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

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. 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. 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. 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 spill 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.

Code : 000001021601

Date of issue/Date of revision :

: 5 August 2024

SIGMALINE 2500 HARDENER

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. 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

No exposure limit value known.

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	:	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.

English (G	6B)
------------	-----

Conforms to Regulation (EC) N	. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)
2020/878	

2020/878	
Code : 000001021601	Date of issue/Date of revision : 5 August 2024
SIGMALINE 2500 HARDENER	
Individual protection measur	es
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	: Chemical splash goggles and face shield.
Skin protection	
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.
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

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: 🕅ear.
Odour	: Amine-like. [Strong]
Odour threshold	: Not available.
Melting point/freezing point	 May start to solidify at the following temperature: -15.4°C (4.3°F) This is based on data for the following ingredient: benzyl alcohol. Weighted average: -15.71°C (3.7°F)
Initial boiling point and boiling range	: >37.78°C
Flammability	: Not available.

English (GB)

Code : 000001021601 SIGMALINE 2500 HARDENER			Date of	issue/I	Date of revision	on	: 5 Au	gust 2024
SECTION 9: Physical a	nd	chemical prop	erties					
Upper/lower flammability or explosive limits	:	Greatest known rang (methylamine))	e: Lower:	18.3%	Upper: 46.6%	(bicyclo	2.2.1]hep	otanebis
Flash point	:	Closed cup: 118°C	Closed cup: 118°C					
Auto-ignition temperature Decomposition temperature	:	430°C (806°F) Stable under recomm	430°C (806°F) Stable under recommended storage and handling conditions (see Section 7).					
рН	:	Not applicable.						
Viscosity	:	Kinematic (40°C): >2	1 mm²/s					
Solubility(ies)	- :							
Media		Result						
cold water		Not soluble						
Partition coefficient: n-octano water	I/ :	Not applicable.						
Vapour pressure		:	Vapour Pressure at 20°C		Vapo	our press	sure at 50°C	
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		bicyclo[2.2.1]heptanebis (methylamine)	6.97557195	0.93				
Evaporation rate	:	0.007 (benzyl alcohol) compar	ed with	butyl acetate		·	
Relative density	:	1.03						
Vapour density	:	Highest known value: 3.7 (Air = 1) (benzyl alcohol).						
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 pre	sent an o	xidizing	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 Formaldehyde. metal oxide/oxides

Code : 000001021601

Date of issue/Date of revision

: 5 August 2024

SIGMALINE 2500 HARDENER

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient	t name	Res	ult	Species	Dose	Exposure
bicyclo[2.2.1]heptanebis(methylamine)		LD50 Oral		Rat	961 to 1400 mg/	-
benzyl alcohol		LC50 Inhalation	Dusts and	Rat	kg >4178 mg/m³	4 hours
		LD50 Dermal		Rabbit	2000 mg/kg	-
		LD50 Oral		Rat	1.23 g/kg	-
salicylic acid		LD50 Oral		Rat	0.891 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine)	LD50 Dermal		Rabbit	>2000 mg/kg	-
2,4,6-tris(dimethylaminome	thyl)phonol	LD50 Oral LD50 Dermal		Rat Rat	2413 mg/kg 1280 mg/kg	-
2,4,0-015(01116011910111110116	(inyi)prienoi	LD50 Oral		Rat	1200 mg/kg	-
Conclusion/Summary	: There are	no data available	on the mixtur	e itself.	0.0	
rritation/Corrosion						
Conclusion/Summary						
Skin	: There are r	no data available c	on the mixture	itself.		
Eyes	: There are r	no data available c	on the mixture	e itself.		
Respiratory	: There are r	no data available c	on the mixture	e itself.		
Sensitisation						
Conclusion/Summary						
Skin	: There are	no data available	on the mixture	e itself.		
Respiratory	: There are	no data available	on the mixtur	e itself.		
<u>Autagenicity</u>						
Conclusion/Summary	: There are	no data available	on the mixtur	e itself.		
Carcinogenicity						
Conclusion/Summary	: There are	no data available	on the mixture	e itself.		
Reproductive toxicity						
Conclusion/Summary	: There are	no data available	on the mixture	e itself.		
<u>Feratogenicity</u>						
Conclusion/Summary	: There are	no data available	on the mixtur	e itself.		
Product/in	gredient name		Category	Route of exposure		organs
nformation on likely outes of exposure	: Not availat	ole.	<u> </u>	<u> </u>	I	
Potential acute health effe	<u>cts</u>					
Inhalation	: Harmful if	inhaled.				
Ingestion	: Harmful if	swallowed. Corro	sive to the dig	gestive tract. (Causes burns.	
Skin contact	: Causes se	evere burns. May	cause an alle	rgic skin react	ion.	
Eye contact	: Causes se	erious eye damage) .			
Symptoms related to the p	hysical, chemi	cal and toxicolog	gical charact	eristics		
Inhalation	reduced fo increase in	ymptoms may incl betal weight n foetal deaths alformations	ude the follow	<i>v</i> ing:		

Code : 000001021601	Date of issue/Date of revision	: 5 August 2024
SIGMALINE 2500 HARDENER		

SECTION 11: Toxicological information

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
Eye contact	: Adverse symptoms may include the following: pain watering redness
Delayed and immediate effe	<u>cts as well as chronic effects from short and long-term exposure</u>
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	i <u>cts</u>
Not available.	
Conclusion/Summary	: Not available.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: Suspected of damaging the unborn child.
Other information	: Not available.
Causes digestive tract burns	Repeated exposure to high vapor concentrations may cause irritation of the respiratory

Causes digestive tract burns. 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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F. 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.

Code : 000001021601 SIGMALINE 2500 HARDENER Date of issue/Date of revision

: 5 August 2024

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - Daphnia Iongispina - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	21 days
N-(3-(trimethoxysilyl)propyl)ethylenediamine	EC50 597 mg/l	Fish	96 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 >100 mg/l Acute LC50 >100 mg/l	Daphnia Fish	48 hours 96 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2,4,6-tris (dimethylaminomethyl)phenol	OECD 301D Ready Biodegradability - Closed Bottle Test	4 % - Not readily - 28 days	-	-
Conclusion/Summary : There are no data available on the mixture itself.				

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol 2,4,6-tris(dimethylaminomethyl)phenol	-	-	Readily Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
benzyl alcohol	0.87	-	Low
salicylic acid	2.21 to 2.26	-	Low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	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.

Code: 000001021601Date of issue/Date of revision: 5 August 2024SIGMALINE 2500 HARDENER

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

ProductMethods 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 catalogue (EWC)

Waste code		Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous subs	
Packaging	- 1	
Methods of disposal		of waste should be avoided or minimised wherever possible. Waste d be recycled. Incineration or landfill should only be considered wher easible.
Type of packaging		European waste catalogue (EWC)
Container	15 01 06	mixed packaging
Special precautions		d its container must be disposed of in a safe way. Care should be dling 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	П	П	Π
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol)	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 : (E) IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

English (GB)	South Africa	12/14
Eligion (OD)	ooddii Amea	12/14

ı (EC) No. 1907/2006 (RE/	ACH), Annex II, as amended by Commission	n Regulation (EU)
21601	Date of issue/Date of revision	: 5 August 2024
ENER		
insport informatio	, n	
	us substance mark may appear if required by c	other transportation
upright and secu	ure. Ensure that persons transporting the produ	
: Not applicable.		
	21601 DENER Ansport information e environmentally hazardou ulations. Is for : Transport withi upright and secu event of an accid	DENER ansport information a environmentally hazardous substance mark may appear if required by or ulations. as for : Transport within user's premises: always transport in closed upright and secure. Ensure that persons transporting the product of an accident or spillage.

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.

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.

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

		English (GB)	South Africa	13/14
statements	H312 H314 H317 H318 H319 H332 H335 H361d H400 H410	Harmful in contact with skin. Causes severe skin burns and e May cause an allergic skin react Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Suspected of damaging the unb Very toxic to aquatic life. Very toxic to aquatic life with lon	orn child.	
Abbreviations and acronyms Full text of abbreviated H	CLP = 0 1272/20 DNEL = EUH sta PNEC =	Acute Toxicity Estimate Classification, Labelling and Packa 108] Derived No Effect Level atement = CLP-specific Hazard sta Predicted No Effect Concentratio REACH Registration Number Harmful if swallowed.	atement	(EC) No.

Code : 00000102160 SIGMALINE 2500 HARDENE		Date of issue/Date of revision: 5 August 2024
SECTION 16: Other	information	
	H411 Toxic to aqua	atic life with long lasting effects.
Full text of classifications [CLP/GHS]	: Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Eye Dam. 1 Eye Irrit. 2 Repr. 2 Skin Corr. 1B Skin Corr. 1C Skin Sens. 1 Skin Sens. 1B STOT SE 3	ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category LONG-TERM (CHRONIC) AQUATIC HAZARD - Category LONG-TERM (CHRONIC) AQUATIC HAZARD - Category SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 REPRODUCTIVE TOXICITY - Category 2 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 1C SKIN SENSITISATION - Category 1 SKIN SENSITISATION - CATEGORY 3
<u>History</u>		
Date of issue/ Date of revision	: 5 August 2024	
Date of previous issue	: 25 June 2024	
Prepared by	: EHS	
Version	: 1.03	
B ¹ I I		

<u>Disclaimer</u>

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.