SAFETY DATA SHEET

Date of issue/Date of revision

: 9 October 2024

Version

: 1.02





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

1.1 Product identifier	
Product name	: SIGMASHIELD 420/460/880/880GF HARDENER
Product code	: 000001189596
Other means of identificat	on
00446815; 00446816; 00446	819
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.; Coating.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
1.3 Details of the supplier o	the safety data sheet
	-
Nigeria	ited top, Badagry Expressway, Orile Iganmu, Lagos
Tel: 00 234 (0) 8138672483	
e-mail address of person responsible for this SDS	: PS.ACEMEA@ppg.com

1.4 Emergency telephone : 00234 127 173 85 number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture <u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u>

Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412

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

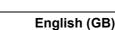
See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements Hazard pictograms



Signal word



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SECTION 2: Hazards identification

Hazard statements	 Flammable liquid and vapour. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Response	 IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P304 + P310, P301 + P310, P403 + P233, P501
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	nents
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 vPvB.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
₽poxy Amine Resin	CAS: SUB123903	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
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	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
		English	i (GB)	Nigeria	2/15

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

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SECTION 3: Composition/information on ingredients

			STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412		
Propylidynetrimethanol, propoxylated, reaction products with ammonia	REACH #: 01-2119556886-20 EC: 500-105-6 CAS: 39423-51-3	≥10 - <25	Acute Tox. 4, H302 Acute Tox. 4, H312 Eye Dam. 1, H318 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/ kg ATE [Dermal] = 1100 mg/kg	[1]
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-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥5.0 - ≤10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
m-phenylenebis (methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0	≥1.0 - <5.0	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 EUH071	ATE [Oral] = 930 mg/ kg ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above.	ATE [Inhalation (vapours)] = 17.8 mg/l	[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.

Туре

[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.

SUB codes represent substances without registered CAS Numbers.

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SECTION 4: First aid measures

4.1 Description of first aid m	ieasures
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

4.2 Most important syn	iptoms and enects, 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	: Harmful if swallowed.
Over-exposure signs/	<u>symptoms</u>
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: stomach pains
4.3 Indication of any in	nmediate 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
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

5.2 Special hazards arising fr	om	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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides
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	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
6.3 Methods and material for	containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

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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

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. Do not get in eyes or on skin or clothing. Do not breathe vapour of mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Ex	Exposure limit values			
x ylene	EU OEL (Europe, 1/2022) [xylene, mixed isomers] A	bsorbed		
	through skin.				
	TWĂ 8 hours: 50 ppm.				
	TWA 8 hours: 221 mg/m	³ .			
	STEL 15 minutes: 100 p	om.			
	STEL 15 minutes: 442 m	g/m³.			
benzyl alcohol	IPEL (-)				
	TWA: 5 ppm.				
	STEL: 10 ppm.				
2-methylpropan-1-ol	ACGIH TLV (United State	es, 7/2023)			
	TWA 8 hours: 50 ppm.				
	TWA 8 hours: 152 mg/m	³ .			
<u>.</u>	English (GB)	Nigeria	6/15		

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m-phenylenebis(methylamin ethylbenzene	9)	ACGIH TLV (United States, 7/2023) Absorb C: 0.018 ppm. EU OEL (Europe, 1/2022) Absorbed throug TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m ³ . STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m ³ .	Ū
vylene		DOL BEI (South Africa, 3/2021) [xylenes] BEI: 1.5 g/g creatinine, methylhippuric acid end of shift.	[in urine]. Sampling time
ethylbenzene		DOL BEI (South Africa, 3/2021) BEI: 0.15 g/g creatinine, sum of mandelic a acid [in urine]. Sampling time: end of shift.	icid and phenylglyoxylic
Recommended monitoring procedures	Standard EN 689 by inhalation to c strategy) Europe application and u biological agents requirements for agents) Referen	d be made to monitoring standards, such as t 9 (Workplace atmospheres - Guidance for the chemical agents for comparison with limit valu ean Standard EN 14042 (Workplace atmosph use of procedures for the assessment of expo s) European Standard EN 482 (Workplace atr the performance of procedures for the measu nee to national guidance documents for metho bstances will also be required.	assessment of exposure es and measurement eres - Guide for the sure to chemical and nospheres - General urement of chemical
2 Exposure controls			
Appropriate engineering controls	other engineerin recommended o	lequate ventilation. Use process enclosures, I g controls to keep worker exposure to airborn r statutory limits. The engineering controls als oncentrations below any lower explosive limits ment.	e contaminants below an so need to keep gas,
Individual protection measu	<u>ires</u>		
Hygiene measures	eating, smoking Appropriate tech Contaminated w contaminated clo	rearms and face thoroughly after handling che and using the lavatory and at the end of the w iniques should be used to remove potentially of ork clothing should not be allowed out of the v othing before reusing. Ensure that eyewash s se to the workstation location.	orking period. contaminated clothing. vorkplace. Wash
Eye/face protection <u>Skin protection</u>	: Chemical splash	goggles and face shield.	
Hand protection	worn at all times necessary. Con- during use that the noted that the tin glove manufactu protection time of frequently repea (breakthrough tir When only brief (breakthrough tir The user must co product is the mo	ant, impervious gloves complying with an appr when handling chemical products if a risk ass sidering the parameters specified by the glove he gloves are still retaining their protective pro- ne to breakthrough for any glove material may irres. In the case of mixtures, consisting of se of the gloves cannot be accurately estimated. ted contact may occur, a glove with a protection me greater than 480 minutes according to EN contact is expected, a glove with a protection me greater than 30 minutes according to EN 3 heck that the final choice of type of glove sele ost appropriate and takes into account the par	sessment indicates this is a manufacturer, check operties. It should be to be different for different overal substances, the When prolonged or on class of 6 374) is recommended. class of 2 or higher 374) is recommended. cted for handling this
	as included in the	e user's risk assessment.	

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Body protection	: Personal protective equipme performed and the risks invo handling this product. When static protective clothing. Fo should include anti-static over	nt for the body should be selected lved and should be approved by there is a risk of ignition from sta r the greatest protection from sta eralls, boots and gloves. Refer to on material and design requireme	a specialist before atic electricity, wear anti- tic discharges, clothing European Standard EN
Other skin protection		y additional skin protection meas ormed and the risks involved and s product.	
Respiratory protection	:		
Environmental exposure controls	they comply with the require cases, fume scrubbers, filter	r work process equipment should nents of environmental protectior s or engineering modifications to emissions to acceptable levels.	n legislation. In some

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance								
Physical state	:	Liquid.						
Colour	:	Colourless.						
Odour	:	Amine-like. [Strong]	Amine-like. [Strong]					
Odour threshold	1	Not available.						
Melting point/freezing point	1	Not determined.						
Initial boiling point and boiling range	:	>37.78°C						
Flammability	:	Not determined. The	re are no	data ava	ailable on the i	mixture it	self.	
Upper/lower flammability or explosive limits	:	Not available.						
Flash point	:	Closed cup: 44°C						
Auto-ignition temperature	:	Ingredient name		°C	°F	1	Method	
		Propylidynetrimethanol, preaction products with an		, 320	608	E	U A.15	
Decomposition temperature	:	Stable under recomr	nended st	orage a	nd handling co	onditions	(see Sec	tion 7).
рН	:	Not applicable. insoluble in water.						
Viscosity	:							
Viscosity	:	60 - 100 s (ISO 6mm)						
Solubility(ies)	:							
Media		Result						
cold water		Not soluble						
Partition coefficient: n-octanol water	1 :	Not applicable.						
Vapour pressure	:	Ingradient nome	Vapour Pressure at 20°C		Vapour pressure 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			

Conforms to Regulation (EC 2020/878) No. 1907/2006 (REACH)	, Annex II, as amended by Commission	n Regulation (EU)				
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SIGMASHIELD 420/460/880/880GF HARDENER							
SECTION 9: Physica	I and chemical pr	operties					
Explosive properties	: The product itself vapour or dust wit	is not explosive, but the formation of an the air is possible.	explosible mixture of				
Oxidising properties	: Product does not	present an oxidizing 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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
x ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Propylidynetrimethanol, propoxylated,	LD50 Dermal	Rabbit	0.4 g/kg	-
reaction products with ammonia				
	LD50 Oral	Rat	0.22 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>5 mg/l	4 hours
	mists			
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
m-phenylenebis(methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	LD50 Oral	Rat	930 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-

English (GB)

Nigeria

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SECTION 11: Toxicological information

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

Result	Species	Score	Exposure	Observation
Skin - Moderate irritant Skin - Severe irritant	Rabbit Rat	-	24 hours 500 mg 4 hours	- 4 hours
	Skin - Moderate irritant	Skin - Moderate irritant Rabbit	Skin - Moderate irritant Rabbit -	Skin - Moderate irritantRabbit-24 hours 500 mg

Conclusion/Summary

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

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

Sensitisation

Skin

Eyes

Product/ing	edient name	Route of exposure	Species	Result
m-phenylenebis(methylam	ine)	skin	Mouse	Sensitising
Conclusion/Summary				
Skin	: There are no data avai	lable on the mixture	e itself.	
Respiratory	: There are no data avail	lable on the mixture	e itself.	
Mutagenicity				
Conclusion/Summary	: There are no data avai	lable on the mixture	e itself.	
Carcinogenicity				

- **Conclusion/Summary** : There are no data available on the mixture itself.
- **Reproductive toxicity Conclusion/Summary** : There are no data available on the mixture itself.

Teratogenicity

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene 2-methylpropan-1-ol	Category 3 Category 3 Category 3		Respiratory tract irritation Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
xylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Information on likely : Not available.	

routes of exposure

Potential acute health effects

Inhalation	: May cause respiratory irritation.
Ingestion	: Harmful if swallowed.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	: Causes serious eye damage.

English	(GB)
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code : 000001189596 GIGMASHIELD 420/460/880/88		Date of issue/Date of revision: 9 October 2024F HARDENER
SECTION 11: Toxicol	log	ical information
Symptoms related to the ph	ysi	cal, chemical and toxicological characteristics
Inhalation		Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion		Adverse symptoms may include the following: stomach pains
Skin contact		Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
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.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ects	
Not available.		
Conclusion/Summary		Not available.
General	:	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/o dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	No known significant effects or critical hazards.
Other information	1	Not available.

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 propertiesNot available.11.2.2 Other information

Not available.

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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
✓methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh	Daphnia -	-
	water	Ceriodaphnia dubia	

: 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	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

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

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
X lene	3.12	7.4 to 18.5	Low
Propylidynetrimethanol, propoxylated, reaction products with ammonia	-1.13	-	Low
benzyl alcohol	0.87	-	Low
2-methylpropan-1-ol	1	-	Low
m-phenylenebis(methylamine)	0.18	2.69	Low
2,4,6-tris(dimethylaminomethyl)phenol ethylbenzene	0.219 3.6	- 79.43	Low Low

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

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

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SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

Methods of disposal

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

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging		European waste catalogue (EWC)
Container	15 01 06	mixed packaging
Special precautions	taken when Empty conta residues ma Do not cut, v	al and its container must be disposed of in a safe way. Care should be handling emptied containers that have not been cleaned or rinsed out. ainers or liners may retain some product residues. Vapour from product by create a highly flammable or explosive atmosphere inside the container. weld or grind used containers unless they have been cleaned thoroughly word dispersal of spilt material and runoff and contact with soil, waterways, 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	III	Ш	III
14.5 Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

English (GB)

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SIGMASHIEL	D 420/460/880/88	OGF HARDENER		
SECTION	14: Transpo	ort information		
ADR/RID	: None ident	tified.		
Tunnel code	e : (D/E)			
IMDG	: None ident	tified.		
ΙΑΤΑ	: None ident	tified.		
14.6 Special user	precautions for		ser's premises: always transport in closed Ensure that persons transporting the produ or spillage.	
14.7 Transpo according to instruments		: Not applicable.		

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.

Explosive precursors : Not applicable.

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 has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number 			
Full text of abbreviated H statements	: H225 H226 H302 H304 H312 H314 H315 H317	Highly flammable liquid and vapour. Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters air Harmful in contact with skin. Causes severe skin burns and eye dam Causes skin irritation. May cause an allergic skin reaction.		
		Fradiak (OD)	Nimerie	44/45

English (GB)

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SIGMASHIELD 420/460/880/8	80GF HARDENER	
SECTION 16: Other i	nformation	
	H319Causes serioH332Harmful if inhH335May cause reH336May cause drH373May cause drH411Toxic to aquaH412Harmful to acEUH071Corrosive to to	espiratory irritation. rowsiness or dizziness. amage to organs through prolonged or repeated exposure. atic life with long lasting effects. quatic life with long lasting effects. the respiratory tract.
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. 1B STOT RE 2	ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 1C SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
History Date of issue/ Date of	: 9 October 2024	
revision		
Date of previous issue	: 17 April 2024	
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