Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

Date of issue/Date of revision

: 9 November 2022



: 1

Version

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

1.1 Product identifier	
Product name	: SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER
Product code	: 00320277
Product description	1 () () () () () () () () () (
Product type	: Liquid.
Other means of identification	: Not available.
1.2 Relevant identified uses	s of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

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

e-mail address of person :

: Product.Stewardship.EMEA@ppg.com

responsible for this SDS

1.4 Emergency telephone number

<u>Supplier</u>

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture Classification according to UK CLP/GHS

Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 1B, H360F Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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



United Kingdom (UK)

Code : 00320277	Date of issue/Date of revision	: 9 November 2022
SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER		

SECTION 2: Hazards identification

Signal word	1	Danger
Hazard statements	1	Flammable liquid and vapour.
		Causes severe skin burns and eye damage.
		May cause an allergic skin reaction.
		Suspected of causing cancer. May damage fertility.
		Very toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
Response	1	Collect spillage. IF exposed or concerned: Get medical advice or attention.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
		P280, P210, P273, P391, P308 + P313, P501
Supplemental label elements	1	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Restricted to professional users.
Special packaging requirem	er	<u>its</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	1	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	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

	Mixture			
3.2 Mixtures :				
Product/ingredient name	Identifiers	%	Classification	Туре
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥10 - ≤16	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	[1] [2]
Polyaminoamide	EC: Polymer CAS: 68082-29-1	≥5.0 - ≤10	Eye Dam. 1, H318	[1]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]
benzyl alcohol	REACH #: 01-2119492630-38	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H332	[1]
English (GB)	United P	(ingdom (UK)		2/1

Date of issue/Date of revision SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

: 9 November 2022

SECTION 3: Composition/information on ingredients

	EC: 202-859-9		Eye Irrit. 2, H319	
cyclohexanone	CAS: 100-51-6 Index: 603-057-00-5 REACH #: 01-2119453616-35 EC: 203-631-1 CAS: 108-94-1	≥1.0 - ≤5.0	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332	[1] [2]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Index: 606-010-00-7 REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥1.0 - ≤5.0	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2,	[1]
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	REACH #: 01-2119514687-32 EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥1.0 - ≤5.0	H411 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	[1]
phenol, dodecyl-, branched	REACH #: 01-2119513207-49 EC: 310-154-3 CAS: 121158-58-5 Index: 604-092-00-9	≥1.0 - ≤5.0	Skin Corr. 1C, H314 Eye Dam. 1, H318 Repr. 1B, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl- 3,5,5-trimethylcyclohexylamine	EC: 500-101-4 CAS: 38294-64-3	≥1.0 - ≤5.0	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412	[1]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥1.0 - ≤3.7	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
Amines, polyethylenepoly-, triethylenetetramine fraction	REACH #: 01-2119487919-13 EC: 292-588-2 CAS: 90640-67-8	<1.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
salicylic acid	REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5	≤0.30	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d	[1]
			See Section 16 for the full text of the H statements declared above.	

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. Type

[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.

Date of issue/Date of revision

: 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 3: Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

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

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/sympto	om	<u>IS</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 dryness cracking 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 immedia	te	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.

	IO. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758
Code : 00320277 SIGMASHIELD 2/AMERLOC	Date of issue/Date of revision : 9 November 2022 K 2 GFA HARDENER : 9 November 2022
SECTION 5: Firefigh	ting measures
5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising	rom the substance or mixture
Hazards from the substance or mixture	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions 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

for me-fighters	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.

SECTION 6: Accidental release measures

contractor.

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

Date of issue/Date of revision

: 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 6: Accidental release measures

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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other 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

Storage temperature: 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.

- Code :
 - : 00320277

Date of issue/Date of revision

: 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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).

Occupational exposure limits

Product/ingredient name	Exposure limit values			
4-methylpentan-2-one	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 416 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes.			
	TWA: 208 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.			
cyclohexanone	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed			
	through skin. STEL: 20 ppm 15 minutes. TWA: 10 ppm 8 hours. STEL: 82 mg/m ³ 15 minutes. TWA: 41 mg/m ³ 8 hours.			
2-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 231 mg/m ³ 15 minutes. STEL: 75 ppm 15 minutes. TWA: 154 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.			

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
4-methylpentan-2-one	4-methylpentan-2-one DNEL		4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	14.7 mg/m ³	General population	Local
	DNEL	Long term Inhalation	14.7 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	83 mg/m³	Workers	Local
	DNEL	Long term Inhalation	83 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	155.2 mg/m ³	General population	Local
	DNEL	Short term Inhalation	155.2 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	208 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	208 mg/m ³	Workers	Systemic
2,4,6-tris	DNEL	Long term Oral	0.075 mg/kg bw/day	General population	Systemic
(dimethylaminomethyl)phenol		_			
	DNEL	Short term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.13 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.13 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m ³	Workers	Systemic
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m ³	Workers	Systemic

Date of issue/Date of revision : 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 8: Exposure controls/personal protection

-					
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m³	Workers	Systemic
cyclohexanone	DNEL	Short term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	-		Workers	•
		Short term Dermal	4 mg/kg bw/day		Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	20 mg/m³	General population	Local
	DNEL	Short term Inhalation	20 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	40 mg/m ³	General population	Local
	DNEL	Long term Inhalation	40 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	40 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	80 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	80 mg/m ³	Workers	Systemic
Fatty aside C19 upgetd	DNEL		0		
Fatty acids, C18-unsatd.,	DINEL	Long term Oral	0.56 mg/kg bw/day	General population	Systemic
dimers, oligomeric reaction					
products with tall-oil fatty					
acids and triethylenetetramine					
	DNEL	Long term Dermal	0.56 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.97 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.9 mg/m ³	Workers	Systemic
3-aminomethyl-	DNEL	Short term Inhalation	0.073 mg/m ³	Workers	Local
3,5,5-trimethylcyclohexylamine	DITLE		0.070 mg/m	W ON KOTO	Loodi
	DNEL	Long term Inhalation	0.073 mg/m³	Workers	Local
	DNEL				
where all deale and the second		Long term Oral	0.526 mg/kg bw/day	General population	Systemic
phenol, dodecyl-, branched	DNEL	Long term Inhalation	1.762 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.79 mg/m³	General population	Systemic
	DNEL	Short term Oral	1.26 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	13.26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	44.18 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	50 mg/kg bw/day	General population	•
	DNEL	Short term Dermal	166 mg/kg bw/day	Workers	Systemic
1 1' loopropylidopodiphonol	DNEL		0.05 mg/kg bw/day		•
4,4'-Isopropylidenediphenol,	DINEL	Long term Oral	0.05 mg/kg bw/day	General population	Systemic
oligomeric reaction products					
with 1-chloro-					
2,3-epoxypropane, reaction					
products with 3-aminomethyl-					
3,5,5-trimethylcyclohexylamine					
	DNEL	Long term Dermal	0.05 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.14 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	74 µg/m³	General population	Systemic
	DNEL	Long term Inhalation	0.493 mg/m ³	Workers	Systemic
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m ³	General population	Local
	DNEL			Workers	Local
		Long term Inhalation	310 mg/m ³		
Amines, polyethylenepoly-,	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	Systemic
triethylenetetramine fraction					
	DNEL	Long term Dermal	0.57 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	8 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	1600 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	5380 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.028 mg/cm ²	Workers	Local
	DNEL	Long term Dermal	0.43 mg/cm ²	General population	Local
	DNEL	Short term Dermal			Local
			1 mg/cm^2	General population	
	DNEL	Long term Inhalation	0.096 mg/m³	General population	Systemi
English (GB)		United Kin			8/19

Date of issue/Date of revision

: 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Oral	0.14 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.54 mg/m ³	Workers	Systemic
salicylic acid	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
4-methylpentan-2-one	Fresh water	0.6 mg/l	Assessment Factors
	Marine water	0.06 mg/l	Assessment Factors
	Sewage Treatment Plant	27.5 mg/l	Assessment Factors
	Fresh water sediment	8.27 mg/kg	Equilibrium Partitioning
	Marine water sediment	0.83 mg/kg	Equilibrium Partitioning
	Soil	1.3 mg/kg	Equilibrium Partitioning
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Fresh water	0.043 mg/l	Assessment Factors
	Marine water	0 mg/l	Assessment Factors
	Sewage Treatment Plant	3.84 mg/l	Assessment Factors
	Fresh water sediment	434.02 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	43.4 mg/kg dwt	Equilibrium Partitioning
	Soil	86.78 mg/kg dwt	Equilibrium Partitioning
phenol, dodecyl-, branched	Fresh water	0.074 µg/l	Assessment Factors
	Marine water	0.007 µg/l	Assessment Factors
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Fresh water sediment	0.226 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.027 mg/kg dwt	Equilibrium Partitioning
	Soil	0.118 mg/kg dwt	Equilibrium Partitioning
2-methylpropan-1-ol	Fresh water	0.4 mg/l	Assessment Factors
	Marine water	0.04 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.156 mg/kg dwt	-
	Soil	0.076 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

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

Inc	lividual protection measures	
н	ygiene 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.
<u>S</u>	ye/face protection : <u>kin protection</u> Hand protection :	Chemical splash goggles and face shield.

Date of issue/Date of revision

: 9 November 2022

SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

SECTION 8: Exposure controls/personal 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. nitrile neoprene
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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.

al and c	hemical properti	es		
: Liq	uid.			
: Not	available.			
: Ch	aracteristic.			
: Not	available.			
for	 May start to solidify at the following temperature: 8°C (46.4°F) This is based on data for the following ingredient: 3-aminomethyl-3,5,5-trimethylcyclohexylamine. Weighted average: -43.46°C (-46.2°F) 			
: >37	7.78°C (>100°F)			
: liqu	id			
: Gre	atest known rang	e: Lower: 1.3% Up	per: 13% (benzyl alcohol)	
: Clo	sed cup: 36°C (96	5.8°F)		
:				
	°C	°F	Method	
	379 to 389	714.2 to 732.2		
	: Liqu : Not : Cha : Not : May for We : >37 : liqu : Gre	 Liquid. Not available. Characteristic. Not available. May start to solidify a for the following ingre Weighted average: -4 >37.78°C (>100°F) liquid Greatest known range Closed cup: 36°C (96) 	 Not available. Characteristic. Not available. May start to solidify at the following temp for the following ingredient: 3-aminometh Weighted average: -43.46°C (-46.2°F) >37.78°C (>100°F) liquid Greatest known range: Lower: 1.3% Up Closed cup: 36°C (96.8°F) 	

English (GB)	United Kingdom (UK)	10/19
Eligiisii (OD)	onited Kingdoni (OK)	

Code : 00320277	Date of issue/Date of revision	: 9 November 2022
SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER		

SECTION 9: Physical and chemical properties

2

Decomposition temperature	1 · · · · · · · · · · · · · · · · · · ·	
рН	: Not applicable.	
	Not applicable. insoluble in water.	
Viscosity	: Kinematic (40°C): >21 mm ² /s	
Solubility(ies)	: · · · · · · · · · · · · · · · · · · ·	Method
Media	Result	
cold water	Not soluble	
Miscible with water	: No.	

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

Vapour pressure

	Vapour Pressure at 20°C		V	apour pressure at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa
4-methylpentan-2-one	15.75	2.1			
Relative density	: 1.36	3			
Vapour density					enedicarboxylic acid, di- ed average: 4.06 (Air = 1)
Explosive properties			self is not explosive with air is possible	,	tion of an explosible mixture of
Oxidising properties	: Pro	duct does i	not present an oxid	dizing hazard.	
Particle characteristics					
Median particle size	: Not	applicable			

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/ oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects <u>Acute toxicity</u>

- Code : 00320277
- SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER
- Date of issue/Date of revision

: 9 November 2022

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
4-methylpentan-2-one	LC50 Inhalation Vapour	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl) phenol				
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>4178 mg/m ³	4 hours
	mists	Debbit		
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	1100 mg/kg	-
	LD50 Oral	Rat	1.62 g/kg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
5	LD50 Oral	Rat	>2000 mg/kg	-
3-aminomethyl-	LC50 Inhalation Dusts and	Rat	>5.01 mg/l	4 hours
3,5,5-trimethylcyclohexylamine	mists		0	
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1030 mg/kg	-
phenol, dodecyl-, branched	LD50 Dermal	Rabbit	2520 mg/kg	_
, <u>,</u> ,	LD50 Oral	Rat	5660 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	-
Amines, polyethylenepoly-, triethylenetetramine fraction	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	_
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
			0.001 9/119	

Conclusion/Summary :

: There are no data available on the mixture itself.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER	6844.4	12935.9	185817.4	75.2	30.7
4-methylpentan-2-one	2080	N/A	N/A	11	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
benzyl alcohol	1230	N/A	N/A	N/A	1.5
cyclohexanone	1620	1100	8000	11	N/A
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1030	N/A	N/A	N/A	N/A
phenol, dodecyl-, branched	5660	2520	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
Amines, polyethylenepoly-, triethylenetetramine	1716	1465	N/A	N/A	N/A
fraction					
salicylic acid	891	N/A	N/A	N/A	N/A

Irritation/Corrosion

- SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER
- Date of issue/Date of revision

: 9 November 2022

SECTION 11: Toxicological information

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

Conclusion/Summary : Not available.

: There are no data available on the mixture itself.

There are no data available on the mixture itself.

Eyes Respiratory

Skin

: There are no data available on the mixture itself.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitising
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	skin	Guinea pig	Sensitising

Conclusion/Summary Skin

Skin	: I here are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
<u>Mutagenicity</u>	
Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Reproductive toxicity	
Conclusion/Summary	: There are no data available on the mixture itself.
<u>Teratogenicity</u>	
Conclusion/Summary	1 · · · · · · · · · · · · · · · · · · ·

There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Inhalation

Information on likely routes : Not available.

of exposure

Potential acute health effects

- **Eye contact** : Causes serious eye damage.
 - : No known significant effects or critical hazards.
- **Skin contact** : Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

English (GB)

United Kingdom (UK)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758			
Code : 003202 SIGMASHIELD 2/AME	77 Date of issue/Date of re RLOCK 2 GFA HARDENER	evision : 9 November 2022	
SECTION 11: To	xicological information		
Ingestion	: No known significant effects or critical hazard	ls.	
Symptoms related to t	he physical, chemical and toxicological characterist	<u>ics</u>	
Eye contact	: Adverse symptoms may include the following pain watering redness	j:	
Inhalation	: Adverse symptoms may include the following reduced foetal weight increase in foetal deaths skeletal malformations	j:	
Skin contact	: Adverse symptoms may include the following pain or irritation redness dryness cracking 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

Delayed and immediate effect	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	<u>s</u>	
Not available.		
Conclusion/Summary	Not available.	
General	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.	\L
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	May damage fertility.	
Other information	Not available.	

- Code : 00320277
- Date of issue/Date of revision SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

: 9 November 2022

SECTION 12: Ecological information

12.1 Toxicity

oduct/ingredient name F	Result	Species	Exposure
nethylpentan-2-one A	Acute LC50 >179 mg/l	Fish	96 hours
,6-tris A	Acute LC50 175 mg/l	Fish	96 hours
methylaminomethyl)			
enol		A 1	70 1
tty acids, C18-unsatd., Eners, oligomeric reaction	EC10 1.78 mg/l	Algae	72 hours
oducts with tall-oil fatty			
ds and			
ethylenetetramine			
	Acute EC50 1100 mg/l	Daphnia	48 hours
	Acute EC50 20 mg/l	Aquatic plants - Daphnia magna	72 hours
ethylenetetramine fraction			
A	Acute EC50 31.1 mg/l	Daphnia - Daphnia magna	48 hours
Α	Acute LC50 330 mg/l	Fish - Pimephales promelas	96 hours
A	Acute NOEC 2.5 mg/l	Crustaceans	72 hours
icylic acid A	Acute EC50 1147.57 mg/l Fresh water	Daphnia - Water flea - Daphnia	48 hours
		.	
C	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	21 days
C	Chronic NOEC 5.6 mg/l Fresh water	longispina - Neonate Daphnia - Water flea - Daphnia	

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
4-methylpentan-2-one phenol, dodecyl-, branched	OECD 301F -	83 % - Readily - 28 days 78 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
4-methylpentan-2-one benzyl alcohol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and		-	Readily Readily Not readily
triethylenetetramine phenol, dodecyl-, branched	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
4-methylpentan-2-one	1.9	-	low
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)			
phenol			
benzyl alcohol	0.87	-	low
cyclohexanone	0.86	-	low
3-aminomethyl-	0.99	-	low
3,5,5-trimethylcyclohexylamine			
phenol, dodecyl-, branched	6.1	1601	high
4,4'-Isopropylidenediphenol, oligomeric reaction products	-	5.13	low
with 1-chloro-			
2,3-epoxypropane, reaction products with			
3-aminomethyl-			
3,5,5-trimethylcyclohexylamine			
English (GB)	U	nited Kingdom (UK)	15/19

Code : 00320277 SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER	Date of issue/Date of revision	: 9 November 2022
SECTION 12: Ecological information		

2-methylpropan-1-ol	1	-	low
Amines, polyethylenepoly-,	-2.65	-	low
triethylenetetramine fraction			
salicylic acid	2.21 to 2.26	-	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 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

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

Т	ype of packaging	Waste catalogue		
Cont	tainer	15 01 06	mixed packaging	
Special precautions : This material and its container must be disposed of in a safe taken when handling emptied containers that have not been				

taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Code

: 00320277 SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER Date of issue/Date of revision

: 9 November 2022

SECTION 14: Transport information

	-			
	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
14.4 Packing group	III	111	111	111
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Polyamide, Phenol, dodecyl-, branched)	Not applicable.
Additional information				

ADR/RID	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
ADN	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
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 p user	precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk : Not available. according to IMO instruments

SECTION 15: Regulatory information

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixtur	'e
<u>UK</u>	<u>GB) /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.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Restricted to professional users.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive This product is controlled under the Seveso Directive.

Danger criteria

Code : 00320277 SIGMASHIELD 2/AMERLOCK 2 GFA HARDENER

Date of issue/Date of revision

: 9 November 2022

SECTION 15: Regulatory information

Category

P5c E1

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
-	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative
	,

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Carc. 2, H351	Calculation method
Repr. 1B, H360F	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

[
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

Code : 00320277	Date of issue/Date of revision	: 9 November 2022
SIGMASHIELD 2/AMERLOCK 2 GFA HARDENE	R	

SECTION 16: Other information

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
History	

<u>History</u>

Date of issue/ Date of revision	: 11/9/2022
Date of previous issue	: No previous validation
Prepared by	: EHS
Version	: 1

Disclaimer

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.