# SAFETY DATA SHEET

Date of issue/Date of revision

: 27 August 2024

: 3 Version



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

•	
1.1 Product identifier	
Product name	: SIGMATHERM 230 HARDENER
Product code	: 46230-BHARD/2.6L
Product type	: Liquid.
Other means of identification	: Not available.
1.2 Relevant identified use	es 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
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PPG France Business Support SAS, 3, ZAE "Les Dix Muids", B.P. 89, 59583 Marly Cedex, France, 33 (0)3 27 19 35 00

e-mail address of person : Product.Stewardship.EMEA@ppg.com responsible for this SDS

PPG Architectural Coatings UK Ltd, Huddersfield Road, Birstall, West Yorkshire WF17 9XA, Tel: +44 (0) 1924 354000

### 1.4 Emergency telephone number

**Supplier** +33 (0)3 27 19 35 00 (0800-1700)

### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture **Product definition** : Mixture Classification according to UK CLP/GHS Fam. Lig. 3, H226 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Chronic 2, H411

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 : Danger

Signal word

Code : 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHERM 230 HARDENER		

# SECTION 2: Hazards identification

Hazard statements	:	Fammable liquid and vapour. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May damage fertility. 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	:	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	en	<u>ts</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 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	:	Frolonged or repeated contact may dry skin and cause irritation. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F.

# **SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Classification	Туре
penzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[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 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
Formaldehyde, oligomeric reaction	REACH #:	≥10 - ≤25	Skin Irrit. 2, H315	[1]

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHERM 230 HARDENER			

#### SECTION 3: Composition/information on ingredients 01-2119454392-40 products with 1-chloro-Skin Sens. 1, H317 2,3-epoxypropane and phenol EC: 500-006-8 Aquatic Chronic 2, CAS: 9003-36-5 H411 m-phenylenebis(methylamine) REACH #: ≥10 - ≤22 Acute Tox. 4, H302 [1] 01-2119480150-50 Acute Tox. 4, H332 EC: 216-032-5 Skin Corr. 1B, H314 CAS: 1477-55-0 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 EUH071 CAS: 445498-00-0 ≥5.0 - ≤8.8 Acute Tox, 4, H302 Formaldehyde, polymer with N,N-[1] dimethyl-1,3-propanediamine and Aquatic Acute 1, H400 phenol (M=1) Aquatic Chronic 1, H410 (M=1) 2-methylpropan-1-ol ≥5.0 - ≤10 Flam. Liq. 3, H226 [1] [2] REACH #: Skin Irrit. 2, H315 01-2119484609-23 EC: 201-148-0 Eye Dam. 1, H318 CAS: 78-83-1 STOT SE 3, H335 Index: 603-108-00-1 STOT SE 3, H336 2,4,6-tris(dimethylaminomethyl) REACH #: ≥1.0 - ≤5.0 Acute Tox. 4, H302 [1] phenol Acute Tox, 4, H312 01-2119560597-27 EC: 202-013-9 Skin Corr. 1C, H314 Eye Dam. 1, H318 CAS: 90-72-2 N-(3-(trimethoxysilyl)propyl) EC: 217-164-6 ≥1.0 - ≤5.0 Eye Dam. 1, H318 [1] ethylenediamine CAS: 1760-24-3 Skin Sens. 1B, H317 STOT SE 3, H335 ethylbenzene REACH #: ≥1.0 - ≤5.0 Flam. Liq. 2, H225 [1] [2] 01-2119489370-35 Acute Tox. 4, H332 EC: 202-849-4 STOT RE 2, H373 CAS: 100-41-4 (hearing organs) Index: 601-023-00-4 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 oxirane, mono[(C12-14-alkyloxy) REACH #: ≥1.0 - ≤5.0 Skin Irrit. 2, H315 [1] methyl] derivs. 01-2119485289-22 Skin Sens. 1. H317 EC: 271-846-8 CAS: 68609-97-2 Index: 603-103-00-4 bisphenol A ≤1.6 REACH #: Eye Dam. 1, H318 [1] [2] Skin Sens. 1, H317 01-2119457856-23 [3] EC: 201-245-8 Repr. 1B, H360F STOT SE 3, H335 CAS: 80-05-7 Index: 604-030-00-0 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=10) salicylic acid REACH #: ≥1.0 - <3.0 Acute Tox. 4, H302 [1] 01-2119486984-17 Eye Dam. 1, H318 EC: 200-712-3 Repr. 2, H361d CAS: 69-72-7 Index: 607-732-00-5 bis[(dimethylamino)methyl]phenol EC: 275-162-0 ≥1.0 - ≤5.0 Skin Corr. 1B, H314 [1] CAS: 71074-89-0 Eye Dam. 1, H318 3-aminopropyldimethylamine REACH #: ≤0.30 Flam. Liq. 3, H226 [1] 01-2119486842-27 Acute Tox. 4, H302 EC: 203-680-9 Acute Tox. 4, H312 CAS: 109-55-7 Skin Corr. 1B, H314 Index: 612-061-00-6 Eye Dam. 1, H318 Skin Sens. 1, H317

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHE	RM 230 HARDENER		

### **SECTION 3: Composition/information on ingredients**

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

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

### SUB codes represent substances without registered CAS Numbers.

### **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	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects		
Eye contact		Causes serious eye damage.
Inhalation		May cause respiratory irritation.
Skin contact		Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion		Farmful if swallowed.
Over-exposure signs/sympt		
Eye contact		Adverse symptoms may include the following: pain watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing 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

Code : 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHERM 230 HARDENER		

# **SECTION 4: First aid measures**

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

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Notes to physician	<ul> <li>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.</li> </ul>
Specific treatments	: No specific treatment.

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising	from the substance or mixture
Hazards from the substance or mixture	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	<ul> <li>Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides Formaldehyde.</li> </ul>
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 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective 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".					

Code : 46230-B SIGMATHERM 230 HAR	HARD/2.6L RDENER	Date of issue/Date of revision	: 27 August 2024
<b>SECTION 6: Acci</b>	dental release	e measures	
6.2 Environmental precautions	and sewers pollution (s	ersal of spilt material and runoff and contact w s. Inform the relevant authorities if the produc ewers, waterways, soil or air). Water polluting ronment if released in large quantities. Collec	ct has caused environmental g material. May be harmful
6.3 Methods and materi	ial for containment	and cleaning up	

0.0 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 (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

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 wellventilated 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.

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

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHE	RM 230 HARDENER		

### **SECTION 7: Handling and storage**

### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

## **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		
xýlene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.		
2-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 231 mg/m <sup>3</sup> 15 minutes. STEL: 75 ppm 15 minutes. TWA: 154 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.		
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.		
bisphenol A	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 2 mg/m <sup>3</sup> 8 hours.		

### **Biological exposure indices**

Product/ingredient name	Exposure indices
xylene	XYLENES
	Id be made to appropriate monitoring standards. Reference to be documents for methods for the determination of hazardous also be required.

#### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
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 <sup>3</sup>	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 <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m <sup>3</sup>	Workers	Systemic
xylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
-	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	221 mg/m <sup>3</sup>	Workers	Systemic

Code : 46230-BHARD/2.6L SIGMATHERM 230 HARDENER

Date of issue/Date of revision

: 27 August 2024

#### **SECTION 8: Exposure controls/personal protection** DNEL Short term Inhalation 260 mg/m<sup>3</sup> General population Local DNEL Short term Inhalation 260 mg/m<sup>3</sup> General population Systemic DNEL Short term Inhalation 442 mg/m<sup>3</sup> Workers Local DNEL Short term Inhalation 442 mg/m<sup>3</sup> Workers Systemic Formaldehyde, oligomeric DMEL Short term Dermal 8.3 µg/cm<sup>2</sup> Workers Local reaction products with 1-chloro-2,3-epoxypropane and phenol DNEL Long term Oral 6.25 mg/kg bw/day General population Systemic Systemic DNEL Long term Inhalation 8.7 mg/m<sup>3</sup> General population DNEL Long term Inhalation 29.39 mg/m<sup>3</sup> Workers Systemic DNEL Long term Dermal 62.5 mg/kg bw/day General population Systemic DNEL Long term Dermal 104.15 mg/kg bw/day Workers Systemic m-phenylenebis(methylamine) DNEL Long term Inhalation 0.2 mg/m<sup>3</sup> Workers Local 0.33 mg/kg bw/day Workers Systemic DNEL Long term Dermal DNEL Long term Inhalation 1.2 mg/m<sup>3</sup> Workers Systemic DNEL Long term Inhalation 55 mg/m<sup>3</sup> Local 2-methylpropan-1-ol General population Local DNEL Long term Inhalation 310 mg/m<sup>3</sup> Workers Long term Oral 2,4,6-tris DNEL 0.075 mg/kg bw/day General population Systemic (dimethylaminomethyl)phenol DNEL Systemic Short term Dermal 0.075 mg/kg bw/day General population DNEL Long term Dermal Systemic 0.075 mg/kg bw/day General population DNEL Short term Inhalation Systemic 0.13 mg/m<sup>3</sup> General population DNEL Long term Inhalation Systemic 0.13 mg/m<sup>3</sup> General population Long term Dermal 0.15 mg/kg bw/day Workers Systemic DNEL Long term Inhalation Workers Systemic DNEL 0.53 mg/m<sup>3</sup> Workers Systemic DNEL Short term Dermal 0.6 mg/kg bw/day Systemic DNEL Short term Inhalation 2.1 mg/m<sup>3</sup> Workers N-(3-(trimethoxysilyl)propyl) DNEL Long term Inhalation 0.1 mg/m<sup>3</sup> General population Local ethylenediamine DNEL Long term Inhalation 0.6 mg/m<sup>3</sup> Workers Local DNEL Long term Oral 4 mg/kg bw/day General population Systemic DNEL Short term Inhalation 4 mg/m<sup>3</sup> General population Local DNEL Short term Inhalation 5.36 mg/m<sup>3</sup> Workers Local DNEL Long term Inhalation 26 mg/m<sup>3</sup> General population Systemic Long term Inhalation 130 mg/m<sup>3</sup> Workers Systemic DNEL Short term Inhalation 26400 mg/m<sup>3</sup> Systemic DNEL General population ethylbenzene DMEL Long term Inhalation 442 mg/m<sup>3</sup> Workers Local DMEL Short term Inhalation 884 mg/m<sup>3</sup> Workers Systemic DNEL Long term Oral 1.6 mg/kg bw/day General population Systemic DNEL Long term Inhalation 15 mg/m<sup>3</sup> General population Systemic DNEL Long term Inhalation 77 mg/m<sup>3</sup> Workers Systemic DNEL Long term Dermal 180 mg/kg bw/day Workers Systemic DNEL Short term Inhalation Local 293 mg/m<sup>3</sup> Workers DNEL oxirane, mono[ Long term Oral 0.5 mg/kg bw/day General population Systemic (C12-14-alkyloxy)methyl] derivs. DNEL Long term Dermal 0.5 mg/kg bw/day General population Systemic DNEL Long term Inhalation 0.87 mg/m<sup>3</sup> General population Systemic DNEL Long term Dermal 1 mg/kg bw/day Workers Systemic DNEL Long term Inhalation 3.6 mg/m<sup>3</sup> Workers Systemic 24 µg/kg bw/day Systemic bisphenol A DNEL Short term Dermal General population DNEL Long term Dermal 24 µg/kg bw/day General population Systemic DNEL Short term Oral 53 µg/kg bw/day General population Systemic DNEL Long term Oral 53 µg/kg bw/day General population Systemic DNEL Short term Dermal 66 µg/kg bw/day Workers Systemic DNEL Long term Dermal 66 µg/kg bw/day Workers Systemic DNEL Short term Inhalation 1 mg/m<sup>3</sup> General population Local General population Long term Inhalation 1 mg/m<sup>3</sup> DNEL Local Short term Inhalation 1 mg/m<sup>3</sup> General population DNEL Systemic DNEL Long term Inhalation 1 mg/m<sup>3</sup> General population Systemic DNEL Short term Inhalation 2 mg/m<sup>3</sup> Workers Local DNEL Long term Inhalation 2 mg/m<sup>3</sup> Workers Local

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision
SIGMATHER	RM 230 HARDENER	

# SECTION 8: Exposure controls/personal protection

	DNEL	Short term Inhalation	2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2 mg/m <sup>3</sup>	Workers	Systemic
salicylic acid	DNEL	Long term Dermal	2.3 mg/kg bw/day	Workers	Systemic
-	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	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Systemic
3-aminopropyldimethylamine	DNEL	Long term Inhalation	1.2 mg/m <sup>3</sup>	Workers	Systemic
	1	1			

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg	-
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
ethylbenzene	Fresh water	0.1 mg/l	Assessment Factors
	Marine water	0.01 mg/l	Assessment Factors
	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	Secondary Poisoning	20 mg/kg	-
bisphenol A	Fresh water	0.018 mg/l	Sensitivity Distribution
	Marine water	0.018 mg/l	Sensitivity Distribution
	Sewage Treatment Plant	320 mg/l	Assessment Factors
	Fresh water sediment	1.2 mg/kg dwt	Assessment Factors
	Marine water sediment	0.24 mg/kg dwt	Assessment Factors
	Soil	3.7 mg/kg dwt	Assessment Factors
3-aminopropyldimethylamine	Fresh water	0.034 mg/l	Assessment Factors
	Marine water	0.003 mg/l	Assessment Factors
	Sewage Treatment Plant	69.5 mg/l	Assessment Factors
	Fresh water sediment	0.221 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.022 mg/kg dwt	Equilibrium Partitioning
	Soil	0.024 mg/kg dwt	Equilibrium Partitioning

# 8.2 Exposure controls

English (GB)

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.
Individual protection measur	<u>95</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection Skin protection	: Chemical splash goggles and face shield.

**United Kingdom (UK)** 

9/19

: 27 August 2024

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATH	ERM 230 HARDENER		

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

<b>Appearance</b>						
Physical state	: Li	quid.				
Colour	: N	ot avai	ilable.			
Odour	: C	haract	eristic.			
Odour threshold	: N	Not available.				
Melting point/freezing point	da	May start to solidify at the following temperature: 14°C (57.2°F) This is based on data for the following ingredient: m-phenylenebis(methylamine). Weighted average: -39.44°C (-39°F)				
Initial boiling point and boiling range	: >:	37.78°	C (>100°F)			
Flammability (solid, gas)	: lic	quid				
Upper/lower flammability or explosive limits	: G	reates	t known range: Lo	wer: 1.3% Upper:	13% (benzyl alcohol)	
Flash point	: C	losed o	cup: 37°C (98.6°F)	)		
Auto-ignition temperature	:					
Ingredient name			°C	°F	Method	
2,4,6-tris(dimethylaminomethyl)phenol			382	719.6	EU A.15	

Ema	uliah .	
ENG	IIISH	(GB)

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHER	RM 230 HARDENER		

# **SECTION 9: Physical and chemical properties**

рН	: Not	applicable					
	Not	applicable	. insoluble in water.				
Viscosity	: Kine	matic (40°	°C): >21 mm²/s				
Solubility(ies)	÷						
Media	Re	esult					
cold water	Nc	t soluble					
Miscible with water	: No.						
Partition coefficient: n-o water	ctanol/ : Not	applicable					
Vapour pressure	:						
	Va	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				
Relative density	: 1		ł			L	
	: High	nest knowr	n value: 3.7 (Air = 1)	(benzyl alco	hol). Weig	hted average: 3.55	
Vapour density	1)						
	: The		self is not explosive, I with air is possible.	but the forma	ation of an e	explosible mixture of	
Vapour density Explosive properties Oxidising properties Particle characteristics	: The vapo	our or dust			ation of an e	explosible mixture of	

# 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 Formaldehyde. metal oxide/oxides

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects <u>Acute toxicity</u> Code : 46230-BHARD/2.6L SIGMATHERM 230 HARDENER

Date of issue/Date of revision

: 27 August 2024

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
penzyl alcohol	LC50 Inhalation Dusts and	Rat	>4178 mg/m <sup>3</sup>	4 hours
	mists	Debbit		
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat Rabbit	1.23 g/kg	-
xylene	LD50 Dermal	Rabbil	1.7 g/kg	-
Formaldabyda aligamaria	LD50 Oral LD50 Oral	Rat	4.3 g/kg	-
Formaldehyde, oligomeric	LD50 Oral	Rai	>10000 mg/kg	-
reaction products with 1-chloro-2,3-epoxypropane				
and phenol				
m-phenylenebis	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
(methylamine)	LC30 Initialation Gas.	nai	700 ppm	THOUIS
(metrylamile)	LD50 Dermal	Rat - Male,	>3100 mg/kg	
	LD00 Dermai	Female	> 5 TOO IIIg/Kg	[-
	LD50 Oral	Rat	930 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	_
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	_
(dimethylaminomethyl)			1200 mg/ng	
phenol				
F · · · · · ·	LD50 Oral	Rat	1200 mg/kg	-
N-(3-(trimethoxysilyl)propyl)	LD50 Dermal	Rabbit	>2000 mg/kg	-
ethylenediamine			J 3 3 3	
,	LD50 Oral	Rat	2413 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	-
oxirane, mono[	LD50 Oral	Rat	17100 mg/kg	-
(C12-14-alkyloxy)methyl]				
derivs.				
bisphenol A	LD50 Dermal	Rabbit	3600 mg/kg	-
	LD50 Oral	Rat	3.25 g/kg	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
3-aminopropyldimethylamine		Rabbit	>1000 mg/kg	-
	LD50 Oral	Rat	410 mg/kg	-

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

Conclusion/Summary 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)
SIGMATHERM 230 HARDENER	1910.9	7006.0	38793.1	55.6	6.8
benzyl alcohol	1230	N/A	N/A	N/A	1.5
xylene	4300	1700	N/A	11	N/A
m-phenylenebis(methylamine)	930	N/A	4500	N/A	N/A
Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol	500	N/A	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100	N/A	N/A	N/A	N/A
bisphenol A	3250	3600	N/A	N/A	N/A
salicylic acid	891	N/A	N/A	N/A	N/A
3-aminopropyldimethylamine	410	1100	N/A	N/A	N/A

Irritation/Corrosion

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMAT	HERM 230 HARDENER		

# SECTION 11: Toxicological information

	•				
Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>x</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
m-phenylenebis(methylamine)	Skin - Severe irritant	Rat	-	4 hours	4 hours
Conclusion/Summary	Not available.				
Skin	There are no data available on	the mixture itse	elf.		
Eyes	: There are no data available on the mixture itself.				
Respiratory	There are no data available on the mixture itself.				
Constituetion					

### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
m-phenylenebis(methylamine) oxirane, mono[ (C12-14-alkyloxy)methyl] derivs.	skin skin	Mouse Guinea pig	Sensitising Sensitising
Conclusion/Summary	•		·
Skin	: There are no data available on the mixture itself.		
Respiratory	: There are no dat	a available on the mixture itself	

<u>Mutagenicity</u>	
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.
<b>Carcinogenicity</b>	
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.
Reproductive toxicity	
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.
<b>Teratogenicity</b>	
<b>Conclusion/Summary</b>	: 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	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Category 3	-	Respiratory tract irritation
bisphenol A	Category 3	-	Respiratory tract irritation

### 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	ASPIRATION HAZARD - Category 1	
ethylbenzene	ASPIRATION HAZARD - Category 1	

Information on likely routes : Not available. of exposure

Potential acute health effects

Code : 46230-BHARI SIGMATHERM 230 HARDEN		Date of issue/Date of revision	: 27 August 2024
SECTION 11: Toxico	logical inf	ormation	
Eye contact	: Causes se	rious eye damage.	
Inhalation	: May cause	e respiratory irritation.	
Skin contact	: Causes se	evere burns. Defatting to the skin. May cause	an allergic skin reaction.
Ingestion	: Harmful if s	swallowed.	
Symptoms related to the phy	ysical, chemica	al and toxicological characteristics	
Eye contact	: Adverse sy	ymptoms may include the following:	
	pain		
	watering redness		
Inhalation		mentence mervinely de the fellowing.	
Innalation		ymptoms may include the following: v tract irritation	
	coughing		
		etal weight	
		n foetal deaths	
Ol in a start		alformations	
Skin contact	pain or irrit	ymptoms may include the following:	
	redness		
	dryness		
	cracking		
	blistering n	nay occur betal weight	
		n foetal deaths	
		alformations	
Ingestion	: Adverse sy	ymptoms may include the following:	
	stomach p		
		petal weight n foetal deaths	
		alformations	
<u>Delayed and immediate effe</u> <u>Short term exposure</u>	<u>cts as well as c</u>	chronic effects from short and long-term e	<u>xposure</u>
Potential immediate	: Not availab	ble.	
effects	. NI-4 - 11-1	-1-	
Potential delayed effects	: Not availab	DIE.	
Long term exposure			
Potential immediate effects	: Not availab	ble.	
Potential delayed effects	: Not availab	ble.	
Potential chronic health eff	fects		
Not available.			
Conclusion/Summary	: Not availab	ble.	
General	or dermatit	or repeated contact can defat the skin and lea tis. Once sensitized, a severe allergic reaction ntly exposed to very low levels.	
Carcinogenicity	•	significant effects or critical hazards.	
Mutagenicity		significant effects or critical hazards.	
Reproductive toxicity	: May dama	-	
Other information	: Not availab	ble.	

Code : 46230-BHARD/2.6L

Date of issue/Date of revision

: 27 August 2024

SIGMATHERM 230 HARDENER

# **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Acute LC50 2.54 mg/l	Fish	96 hours
2-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
N-(3-(trimethoxysilyl)propyl) ethylenediamine	EC50 597 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
oxirane, mono[ (C12-14-alkyloxy)methyl]	LC50 >100 mg/l	Fish - Trout	96 hours
derivs. bisphenol A	Acute LC50 0.885 mg/l Fresh water	Crustaceans	48 hours
	Acute LC50 8.11 mg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	Acute LC50 4.6 mg/l Fresh water	Fish	96 hours
	Chronic NOEC 0.000174 mg/l Fresh water	Fish	5 months
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - Water flea - Daphnia Iongispina - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	21 days
2 aminopropyldimothylamina	Acute LC50 122 mg/l	Fish	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
<b>2</b> ,4,6-tris	OECD 301D	4 % - Not readily - 2	8 days	_	-
(dimethylaminomethyl)	Ready				
phenol	Biodegradability -				
	Closed Bottle				
	Test				
ethylbenzene	-	79 % - Readily - 10	days	-	-
3-aminopropyldimethylamine	OECD 301D	69 % - Readily - 20	days	-	-
Conclusion/Summary	: Not available.				·
Product/ingredient name	Aquatic half-life		Photolysis		Biodegradability
benzyl alcohol	-		-		Readily

penzyl alcohol	-	-	Readily
xylene	-	-	Readily
2,4,6-tris	-	-	Not readily
(dimethylaminomethyl)			-
phenol			
ethylbenzene	-	-	Readily
bisphenol A	-	-	Readily
3-aminopropyldimethylamine	-	-	Readily

### 12.3 Bioaccumulative potential

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHER	RM 230 HARDENER		

# **SECTION 12: Ecological information**

Product/ingredient name	LogPow	BCF	Potential
▶enzyl alcohol	0.87	-	Low
xylene	3.12	7.4 to 18.5	Low
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane	2.7	-	Low
and phenol	0.40	0.00	1
m-phenylenebis (methylamine)	0.18	2.69	Low
2-methylpropan-1-ol	1	-	Low
2,4,6-tris (dimethylaminomethyl) phenol	0.219	-	Low
ethylbenzene	3.6	79.43	Low
oxirane, mono[ (C12-14-alkyloxy)methyl] derivs.	3.77	-	Low
bisphenol A	3.4	43.65	Low
salicylic acid	2.21 to 2.26	-	Low
3-aminopropyldimethylamine	-0.352	-	Low

: Not available.
: 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

Hazardous waste	<ul> <li>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.</li> <li>Yes.</li> </ul>
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-

	Waste code	Waste designation
	08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
E	ackaging	
	Methods of disposal	<ul> <li>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.</li> </ul>

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHE	RM 230 HARDENER		

### **SECTION 13: Disposal considerations**

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Special precautions
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: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	₩N3470	₩N3470	₩N3470	₩N3470
14.2 UN proper shipping name	AINT, CORROSIVE, FLAMMABLE	AINT, CORROSIVE, FLAMMABLE	AINT, CORROSIVE, FLAMMABLE	AINT, CORROSIVE, FLAMMABLE
14.3 Transport hazard class(es)	8 (3)	<b>8</b> (3)	<b>8</b> (3)	<b>8</b> (3)
14.4 Packing group	W	W	W	<b>I</b>
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Epoxy Resin)	Not applicable.

### Additional information

ADR/RID	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Tunnel code	: (D/E)
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 pr	recautions for : Transport within user's premises: always transport in closed containers that are

user

**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 mixture UK (GB)/REACH

Annex XIV - List of substances subject to authorisation Annex XIV None of the components are listed. Substances of very high concern

Code	: 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIGMATHE	RM 230 HARDENER		

### **SECTION 15: Regulatory information**

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	4,4'-isopropylidenediphenol	Candidate	-	1/12/2017
Substance of equivalent concern for human health	4,4'-isopropylidenediphenol	Candidate	-	1/12/2017
Substance of equivalent concern for environment	4,4'-isopropylidenediphenol	Candidate	-	1/12/2017

### **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

Category P5c

E2

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

	5 1 5
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
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 1B, H360F	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

Coc	de : 46230-BHARD/2.6L	Date of issue/Date of revision	: 27 August 2024
SIG	MATHERM 230 HARDENER		

# **SECTION 16: Other information**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H360F	May damage fertility.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
EUH071	Corrosive to the respiratory tract.

### **Full text of classifications**

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 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
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. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

#### <u>History</u>

Date of issue/ Date of revision	: 27 August 2024
Date of previous issue	: 24 July 2023
Prepared by	: EHS
Version	: 3

### **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.