# 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

: 17 April 2024

**Version** : 1.03



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

1.1 Product identifier	
Product name	: SIGMAPRIME 200 HARDENER
Product code	: 000001015182
Product type	: Liquid.
Other means of identification	: 🗖 0202389; 00254137; 00326824; 00467284
1.2 Relevant identified uses	of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: 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 responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

### 1.4 Emergency telephone number

**Supplier** 

+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 Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 3, H412 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 16 for the full text of the H statements declared above.

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

### 2.2 Label elements

Hazard pictograms



#### Signal word

: Danger

English (GB)

Code : 000001015 SIGMAPRIME 200 HARDE		issue/Date of revision	: 17 April 2024
SECTION 2: Hazar	ds identification		
Hazard statements	: Flammable liquid and vapou Causes skin irritation. May cause an allergic skin r Causes serious eye damage May cause respiratory irritat May cause drowsiness or di Harmful to aquatic life with l	eaction. e. ion. zziness.	

Prevention	: Wear protective gloves. Wear 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	<ul> <li>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.</li> </ul>
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
	P280, P210, P273, P305 + P351 + P338, P310, P501
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions	: Not applicable.

Annex XVII - Restrictions	: Not applicab
on the manufacture	

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	
Special packaging requirem	ents
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	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

# SECTION 3: Composition/information on ingredients 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Туре
✓methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥25 - ≤50	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
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]
English (GB)	United I	Kingdom (UK)	1	2/1

Code : 000001015182 SIGMAPRIME 200 HARDENER	Da	ate of issue/Date of revision	n : 17 April 2024	ļ
SECTION 3: Compositio	on/information	on ingredients		
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	CAS: 68410-23-1	≥10 - <25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
ethylbenzene	REACH #:	≥1.0 - ≤5.0	Flam. Liq. 2, H225	[1] [2]

			See Section 16 for the full text of the H statements declared above.	
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≤1.4	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]
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 - ≤3.5	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]
	01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4		Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	['][-]

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.

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

### **SECTION 4: First aid measures**

4.1 Description of first aid n	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	<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	<ul> <li>If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>
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	s a	ind effects, both acute and delayed
Potential acute health effects		
Eye contact	÷	Causes serious eye damage.

Code : 00000101 SIGMAPRIME 200 HARD	
SECTION 4: First	aid measures
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Over-exposure signs/s	<u>ymptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
.3 Indication of any imr	mediate medical attention and special treatment needed
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed

SECTION 5: Firefighting measures		
Specific treatments	: No specific treatment.	
Notes to physician	<ul> <li>In case of inhalation of decomposition products in a fire, symptoms may be delayed.</li> <li>The exposed person may need to be kept under medical surveillance for 48 hours.</li> </ul>	

## SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing	:	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
media		
Unsuitable extinguishing media	-	Do not use water jet.
5.2 Special hazards arising f	ron	the substance or mixture
Hazards from the substance or mixture	:	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides
5.3 Advice for firefighters		
Special 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.

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024	
SIGMAPR	IME 200 HARDENER			
				_

### SECTION 5: Firefighting measures

Special protective<br/>equipment for fire-fighters: Fire-fighters shou<br/>breathing appara<br/>made

: 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**

6.1 Personal precautions, pro	ote	ctive equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	-	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
6.3 Methods and material for	со	ntainment 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. 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.

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024
SIGMAPRIME	E 200 HARDENER		

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

Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional
		information on hygiene measures.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

### **SECTION 8: Exposure controls/personal protection**

### 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
₽-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.
xylene	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.
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.

#### **Biological exposure indices**

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

#### **DNELs/DMELs**

Code : 000001015182 SIGMAPRIME 200 HARDENER Date of issue/Date of revision : 17 April 2024

### **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	310 mg/m <sup>3</sup>	Workers	Local
xylene	DNEL	Long term Oral	12.5 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
	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
Fatty acids, C18-unsatd.,	DNEL	Long term Oral	0.56 mg/kg bw/day	General population	Systemic
dimers, reaction products					
with polyethylenepolyamines					
	DNEL	Long term Dermal	0.56 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.97 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.9 mg/m³	Workers	Systemic
ethylbenzene	DMEL	Long term Inhalation	442 mg/m <sup>3</sup>	Workers	Local
	DMEL	Short term Inhalation	884 mg/m³	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m <sup>3</sup>	Workers	Local
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 <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	0.13 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	0.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m <sup>3</sup>	Workers	Systemic

#### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
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
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	-
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	-

Cod	e : 000001015182	Date of issue/Date of revision	: 17 April 2024
SIG	MAPRIME 200 HARDENER		

### **SECTION 8: Exposure controls/personal protection**

.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.
Individual protection meas	res
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection <u>Skin protection</u>	: Chemical splash goggles and face shield.
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this i 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 differen 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. butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task bein 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.
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 worker 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**

Liquid. Yellow.

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

#### 9.1 Information on basic physical and chemical properties

Appearance	
Physical state	:
Colour	:

English (GB)

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024
SIGMAPRIM	E 200 HARDENER		

# SECTION 9: Physical and chemical properties

-	
Odour	: Amine-like.
Odour threshold	: Not available.
Melting point/freezing point	: May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3,6-diazaoctanethylenediamin. Weighted averag -84.56°C (-120.2°F)
Initial boiling point and boiling range	: >37.78°C (>100°F)
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)
Flash point	: Closed cup: 25°C (77°F)
Auto-ignition temperature	: 430°C (806°F)
pH	: Not applicable.
	Not applicable. insoluble in water.
Viscosity	: Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s
Solubility(ies)	- : · · · · · · · · · · · · · · · · · ·

	Media	Result
	cold water	Not soluble
M	liscible with water : N	lo.

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

÷

#### Vapour pressure

	Vapour Pressure at 20°C			Vapour pressure at 50°C		sure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2			
Relative density	: 0.95		-			
Vapour density	•	: Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Weighted average: 3.17 (Air = 1)				
Explosive properties	: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.					
Oxidising properties Particle characteristics	: Proc	luct does not	present an oxidizi	ng hazard.		
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.

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

Code : 000001015182 Date of issue/Date of revision	: 17
--	------

SIGMAPRIME 200 HARDENER

17 April 2024

### **SECTION 10: Stability and reactivity**

10.6 Hazardous

decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
2.1	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/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	-
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	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
-	LD50 Oral	Rat	1716 mg/kg	-

**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)
GMAPRIME 200 HARDENER	37508.2	6197.4	N/A	43.2	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
xylene	4300	1700	N/A	11	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>x</b> ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	
2,4,6-tris (dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days
Conclusion/Summary Skin	<ul> <li>Not available.</li> <li>There are no data available on the mixture itself.</li> </ul>				
FVAS	There are no data available on the mixture itself				

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

### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	skin	Mouse	Sensitising
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitising

### Conclusion/Summary Skin

: There are no data available on the mixture itself.

Code : 000001015182 SIGMAPRIME 200 HARDENER	Date of issue/Date of revision	: 17 April 2024	
<b>SECTION 11: Toxicological inf</b>	ormation		

	-	
Respiratory	: There are no data available on the mixture itself.	
Mutagenicity		
<b>Conclusion/Summary</b>	: There are no data available on the mixture itself.	
Carcinogenicity		
<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.	
<u>Teratogenicity</u>		
Conclusion/Summary	: There are no data available on the mixture itself.	

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
xylene	Category 3 Category 3	-	Narcotic effects 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 of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Symptoms related to the phy	sical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness

Code : 000001015182 SIGMAPRIME 200 HARDENE	
SECTION 11: Toxico	logical information
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
	Distering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Delayed and immediate effect	: Adverse symptoms may include the following:
	: Adverse symptoms may include the following: stomach pains
<u>Delayed and immediate effect</u> <u>Short term exposure</u> Potential immediate	: Adverse symptoms may include the following: stomach pains
Delayed and immediate effect Short term exposure Potential immediate effects	<ul> <li>Adverse symptoms may include the following: stomach pains</li> <li>cts as well as chronic effects from short and long-term exposure</li> <li>Not available.</li> </ul>
Delayed and immediate effect Short term exposure Potential immediate effects Potential delayed effects	<ul> <li>Adverse symptoms may include the following: stomach pains</li> <li>cts as well as chronic effects from short and long-term exposure</li> <li>Not available.</li> </ul>

Conclusion/Summary	: Not available.
General	<ul> <li>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.</li> </ul>
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

### Other information

: Not available.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	EC50 4.11 mg/l Fresh water	Algae	72 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia	48 hours -
2,4,6-tris (dimethylaminomethyl) phenol	Acute LC50 175 mg/l	Fish	96 hours

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Atty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	-	15 % - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-
Conclusion/Summary	: Not available.			

English	1 (GR)
Linghist	

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024
SIGMAPRIM	E 200 HARDENER		

### **SECTION 12: Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
₩ylene Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	-	-	Readily Not readily
ethylbenzene	-	-	Readily

### **12.3 Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
2-methylpropan-1-ol	1	-	Low
xylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)			
phenol			
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

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

### 12.5 Results of PBT and vPvB assessment

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

#### **12.6 Other adverse effects** : No known significant effects or critical hazards.

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

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

### 13.1 Waste treatment methods

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

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

Methods of disposal

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

Type of packaging		Waste catalogue
Container	15 01 06	mixed packaging

English (GE	3)

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024
SIGMAPRI	ME 200 HARDENER		

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

```
Special precautions
```

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. 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 numbe	r	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name		PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport hazard class(es	5)	3	3	3	3
14.4 Packing group		III	111	111	111
14.5 Environmental hazards Marine pollutar	ıt	No. Not applicable.	Yes. Not applicable.	No. Not applicable.	No. Not applicable.
substances Additional infor	mat	ion			
ADR/RID	: 1		l is not subject to regulation	on in packagings up to 45	0 L according to
Tunnel code					
	: 1	: The product is only regulated as an environmentally hazardous substance when transported in tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.			
ADN	١		ous liquid is not subject to	o regulation in packagings	up to 450 L according
ADN	۲ t	o 2.2.3.1.5.1.	cous liquid is not subject to I is not subject to regulation		

user 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 <u>UK (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.

Code	: 000001015182	Date of issue/Date of revision	: 17 April 2024
SIGMAPRIME	E 200 HARDENER		

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

Annex XVII - Restrictions : Not applicable.

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

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
acronyms	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 Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

#### Full text of abbreviated H statements

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.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

Code : 0000 SIGMAPRIME 200 H	01015182       Date of issue/Date of revision       : 17 April 2024         IARDENER
SECTION 16: 0	Other information
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
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
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 RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

17 April 2024
13 December 2022
EHS
1.03

### **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.