SAFETY DATA SHEET

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 25 October 2023

Version 8

Section 1. Chemical product and company identification				
Product code	: 00382294			
Product name	: SIGMAPRIME 800 HARDENER			
Product name	: SIGMAPRIME 800 HARDENER			
Product type	: Liquid.			
Relevant identified uses o	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	: Not applicable.			
Supplier's details	: PPG Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857			
Emergency telephone number (with hours of operation)	: 00 86 532 83889090			

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview

Liquid. Clear.

Characteristic.

Fammable liquid and vapor.
Harmful if swallowed, in contact with skin or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of causing cancer.
May damage fertility or the unborn child.
Toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Immediately call a POISON CENTER or doctor.

See Section 12 for environmental precautions.

Product name SIGMAPRIME 800 HARDENER

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 1
	 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 35.8% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 35.8% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 63.6%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 48%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 Fammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. May damage fertility or the unborn child. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Section 2. Hazards identification

Response	: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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.
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Physical and chemical hazards	: Flammable liquid and vapor.
Health hazards	: Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. May damage fertility or the unborn child. Prolonged or repeated contact may dry skin and cause irritation.
Symptoms related to the pl	nysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Delayed and immediate effe	ects and also chronic effects from short and long term exposure
SHOLLIELLIEXDOSUIP	

Potential immediate : effects

: Not available.

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Section 2. Hazards identification

Potential delayed effects	: Not available.	
Long term exposure		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Environmental hazards	: Foxic to aquatic life. Very toxic to aquatic life with long lasting effects.	
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.	

Section 3. Composition/information on ingredients

: Mixture

CAS number/other identifiers

Substance/mixture

CAS number : Not applicable.

Ingredient name	%	CAS number
Propylidynetrimethanol, propoxylated, reaction products with ammonia	10 - <25	39423-51-3
ethylbenzene	1 - <10	100-41-4
Epoxy Resin (700 <mw<=1100)< td=""><td>1 - <10</td><td>25036-25-3</td></mw<=1100)<>	1 - <10	25036-25-3
xylene isomers mixture	1 - <10	1330-20-7
bisphenol A	1 - <10	80-05-7
2-methylpropan-1-ol	1 - <10	78-83-1
2,4,6-tris(dimethylaminomethyl)phenol	1 - <10	90-72-2
benzyl alcohol	1 - <10	100-51-6

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 and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Section 4. First aid measures			
Eye contact	Causes serious eye damage.		
Inhalation	: Harmful if inhaled.		
Skin contact	: Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.		
Ingestion	: Harmful if swallowed.		
Over-exposure signs/sym	<u>ptoms</u>		
Eye contact	: Adverse symptoms may include the following: pain watering redness		
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations		
Skin contact	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations		
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations		
Indication of immediate me	dical attention and special treatment needed, if necessary		
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.		
Specific treatments	: No specific treatment.		
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.		

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical	: Mammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
Hazardous thermal decomposition products	 Decomposition products may include the following materials: carbon oxides nitrogen oxides 	
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	: 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

Section 7. Handling and storage

Precautions for safe handling	:	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 vapor 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.
Conditions for safe storage, including any incompatibilities	:	Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
ethylbenzene		GBZ 2.1 (China, 8/2019). PC-STEL: 150 mg/m ³ 15 minutes. PC-TWA: 100 mg/m ³ 8 hours.
xylene isomers mixture		GBZ 2.1 (China, 8/2019). [Xylene (all isomers)] PC-STEL: 100 mg/m ³ 15 minutes. PC-TWA: 50 mg/m ³ 8 hours.
bisphenol A		GBZ 2.1 (China, 8/2019). PC-TWA: 5 mg/m ³ 8 hours.
2-methylpropan-1-ol		ACGIH TLV (United States, 1/2022). TWA: 152 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
Recommended monitoring procedures	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.	
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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.	

Section 8. Exposure controls/personal protection

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.
Individual protection measured	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 protection	:	Chemical splash goggles and face shield.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	:	butyl rubber
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. 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	:	Use an air-fed respirator unless a site-specific assessment determines that an air- fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. 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.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Clear.
Odor	: Characteristic.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 35°C (95°F)
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)
Relative density	: 0.99

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Product name SIGMAPRIME 800 HARDENER

Section 9. Physical and chemical properties

Solubility(ies) :	Media	Result
Solubility(les)	cold water	Not soluble
Viscosity :	Kinematic (40°C): >21 mm²/s	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredie	nts.
Chemical stability	: The product is stable.	
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur	
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.	
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.	
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

LD50 DermalRabbit2460 mg/kg-2,4,6-tris(dimethylaminomethyl)LD50 OralRat2830 mg/kg-phenolLD50 DermalRabbit1.28 g/kg-LD50 DermalRat1280 mg/kg-LD50 DermalRat1200 mg/kg-	Product/ingredient name	Result	Species	Dose	Exposure
ethylbenzeneLC50 Inhalation Vapor LD50 Dermal LD50 Dermal LD50 OralRat17.8 mg/l4 hoursEpoxy Resin (700 <mw<=1100)< td="">LD50 Dermal LD50 Dermal LD50 OralRat3.5 g/kg-Xylene isomers mixtureLD50 Dermal LD50 Dermal LD50 OralRat>2000 mg/kg-xylene isomers mixtureLD50 Dermal LD50 OralRat3600 mg/kg-bisphenol ALD50 Dermal LD50 OralRat3600 mg/kg-2-methylpropan-1-olLC50 Inhalation Vapor LD50 Dermal LD50 Dermal LD50 OralRat24.6 mg/l4 hours2,4,6-tris(dimethylaminomethyl) phenolLD50 Dermal LD50 Dermal LD50 DermalRat1280 mg/kg-LD50 Dermal LD50 OralRat1280 mg/kgLD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal RatRat1280 mg/kg-2,4,6-tris(dimethylaminomethyl) phenolLD50 Dermal LD50 Dermal RatRat1280 mg/kg-LD50 Dermal LD50 OralRat1280 mg/kgLD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal Rat1280 mg/kg</mw<=1100)<>	propoxylated, reaction products	LD50 Dermal	Rabbit	0.4 g/kg	-
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LD50 OralRat3.5 g/kg-Epoxy Resin (700 <mw<=1100)< td="">LD50 DermalRat>2000 mg/kg-xylene isomers mixtureLD50 DermalRat>2000 mg/kg-LD50 OralRat4.3 g/kgbisphenol ALD50 OralRat3.600 mg/kg-2-methylpropan-1-olLC50 Inhalation VaporRat3.25 g/kg-2,4,6-tris(dimethylaminomethyl)LD50 OralRat2830 mg/kg-bisphenolLD50 DermalRat2830 mg/kg-2,4,6-tris(dimethylaminomethyl)LD50 DermalRat1280 mg/kg-LD50 DermalRat1280 mg/kgLD50 OralRat1280 mg/kg</mw<=1100)<>	ethylbenzene	LC50 Inhalation Vapor	Rat		4 hours
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LD50 OralRat>2000 mg/kg-xylene isomers mixtureLD50 DermalRabbit1.7 g/kg-LD50 OralRat4.3 g/kg-LD50 OralRat3600 mg/kg-LD50 DermalRabbit3600 mg/kg-LD50 OralRat3.25 g/kg-2-methylpropan-1-olLC50 Inhalation VaporRat24.6 mg/l4 hoursLD50 DermalRabbit2460 mg/kg-LD50 DermalRat2830 mg/kg-LD50 DermalRat1.28 g/kg-LD50 DermalRat1280 mg/kg-LD50 DermalRat1200 mg/kg-		LD50 Oral	Rat		-
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bisphenol A LD50 Dermal Rabbit 3600 mg/kg - 2-methylpropan-1-ol LC50 Inhalation Vapor LD50 Oral Rat 24.6 mg/l 4 hours 2,4,6-tris(dimethylaminomethyl) LD50 Dermal LD50 Dermal LD50 Oral Rat 2830 mg/kg - LD50 Dermal Rat 2830 mg/kg - LD50 Dermal Rat 1280 mg/kg - LD50 Dermal Rat 1280 mg/kg -	xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
2-methylpropan-1-ol 2-methylpropan-1-ol 2,4,6-tris(dimethylaminomethyl) phenol LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal LD50 Dermal Rat Rat Rat Rat Rat Rat Rat Rat		LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-olLC50 Inhalation Vapor LD50 DermalRat24.6 mg/l4 hours2,4,6-tris(dimethylaminomethyl) phenolLD50 OralRat2830 mg/kg-LD50 DermalRat1.28 g/kg-LD50 DermalRat1280 mg/kg-LD50 DermalRat1280 mg/kg-	bisphenol A	LD50 Dermal	Rabbit		-
LD50 DermalRabbit2460 mg/kg-2,4,6-tris(dimethylaminomethyl)LD50 OralRat2830 mg/kg-phenolLD50 DermalRabbit1.28 g/kg-LD50 DermalRat1280 mg/kg-LD50 DermalRat1200 mg/kg-		LD50 Oral	Rat	3.25 g/kg	-
2,4,6-tris(dimethylaminomethyl)LD50 Oral LD50 DermalRat2830 mg/kg-2,4,6-tris(dimethylaminomethyl)LD50 DermalRabbit1.28 g/kg-LD50 DermalRat1280 mg/kg-LD50 OralRat1200 mg/kg-	2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat		4 hours
2,4,6-tris(dimethylaminomethyl) LD50 Dermal Rabbit 1.28 g/kg - phenol LD50 Dermal Rat 1280 mg/kg - LD50 Oral Rat 1200 mg/kg -		LD50 Dermal	Rabbit		-
phenol LD50 Dermal Rat 1280 mg/kg - LD50 Oral Rat 1200 mg/kg -		LD50 Oral	Rat	2830 mg/kg	-
LD50 Oral Rat 1200 mg/kg -		LD50 Dermal	Rabbit	1.28 g/kg	-
00		LD50 Dermal	Rat	1280 mg/kg	-
benzyl alcohol LC50 Inhalation Dusts Rat >4178 mg/m ³ 4 hours		LD50 Oral	Rat	1200 mg/kg	-
and mists	benzyl alcohol		Rat	>4178 mg/m³	4 hours

Product name SIGMAPRIME 800 HARDENER

Section 11. Toxicological information

LD50 Dermal	Rabbit	2000 mg/kg	-
LD50 Oral	Rat	1.23 g/kg	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene isomers mixture 2,4,6-tris (dimethylaminomethyl) phenol	Skin - Moderate irritant Skin - Visible necrosis	Rabbit Rabbit	-	24 hours 500 mg 4 hours	- 7 days

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
bisphenol A	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	-

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2

Information on the likely routes of exposure	1	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	Harmful if inhaled.
Skin contact	:	Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Section 11. Toxicological information

Ingestion

: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. Long term exposure **Potential immediate** : Not available. effects **Potential delayed effects** : Not available. Potential chronic health effects General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. **Mutagenicity** : No known significant effects or critical hazards. : May damage fertility or the unborn child. **Reproductive toxicity**

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMAPRIME 800 HARDENER	1218.2	1975.6	N/A	28.3	2.6
Propylidynetrimethanol, propoxylated, reaction products with ammonia	500	1100	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
Epoxy Resin (700 <mw<=1100)< td=""><td>2500</td><td>2500</td><td>N/A</td><td>N/A</td><td>N/A</td></mw<=1100)<>	2500	2500	N/A	N/A	N/A
xylene isomers mixture	4300	1700	N/A	11	1.5
bisphenol A	3250	3600	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
benzyl alcohol	1230	2000	N/A	N/A	1.5

Other information

Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
bisphenol A	Acute LC50 0.885 mg/l Fresh water	Crustaceans	48 hours
	Acute LC50 8.11 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> -	48 hours
		Neonate	
	Acute LC50 4.6 mg/l Fresh water	Fish	96 hours
	Chronic NOEC 0.000174 mg/l Fresh water	Fish	5 months
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris (dimethylaminomethyl)pheno	Acute LC50 175 mg/l	Fish	96 hours

Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
ethylbenzene	-	79 % - Rea	adily - 10 days	-		-
Product/ingredient name	Aquatic half-life	e	Photolysis		Biodeg	jradability
ethylbenzene xylene isomers mixture bisphenol A benzyl alcohol	- - -		- - - -		Readily Readily Readily Readily	/ /

Bioaccumulative potential

Product name SIGMAPRIME 800 HARDENER

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Propylidynetrimethanol, propoxylated, reaction products with ammonia	-1.13	-	Low
ethylbenzene	3.6	79.43	Low
xylene isomers mixture	3.12	7.4 to 18.5	Low
bisphenol A	3.4	43.65	Low
2-methylpropan-1-ol	1	-	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
benzyl alcohol	0.87	-	Low

Mobility in soil

Soil/water partition: Not available.coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

	China	UN	IMDG	IATA	
UN number	UN1263	UN1263	UN1263	UN1263	
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	
Transport hazard class(es)	3	3	3	3	
Packing group		Ш	Ш	Ш	
Environmental hazards	✓es. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	₩es.	res. The environmentally hazardous substance mark is not required.	

Product code 00382294 Date of issue 25 October 2023 Version 8 Product name SIGMAPRIME 800 HARDENER Section 14. Transport information					
					Marine pollu substances
Additional in	formation				
CN	: None identifie	ed.			
UN	: None identifie	None identified.			
IMDG	: The marine p	ollutant mark is not requi	red when transporte	ed in sizes of ≤5	5 L or ≤5 kg.
ΙΑΤΑ	: The environm regulations.	nentally hazardous substa	ance mark may app	ear if required b	by other transportation
Special prec		Transport within user's upright and secure. Ensu the event of an accident	re that persons trar		
Transport in to IMO instru		Not applicable.			
Section	15. Regulato	ry information			
.	ory (IECSC) : /	All components are listed			

References	 Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 25 October 2023
Date of previous issue	: 3/17/2023
Version	: 8
	EHS

China Page: 14/15

Product name SIGMAPRIME 800 HARDENER

Section 16. Other information

Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous
Rey to appreviations	
	Goods by Inland Waterway
	ADR = The European Agreement concerning the International Carriage of
	Dangerous Goods by Road
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	RID = The Regulations concerning the International Carriage of Dangerous Goods
	by Rail
	UN = United Nations

✓ Indicates information that has changed from previously issued version.

Notice to reader

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 PPG, 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.