# **SAFETY DATA SHEET**

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



Date of issue/Date of revision 4 September 2022

Version 2.03

revision	4 September 2022					

Section 1. Chemi	cal product and company identification
Product code	: 000001011245
Product name	: SIGMAGUARD 795 HARDENER
Product name	: SIGMAGUARD 795 HARDENER
Other means of identification	: 00123854
Product type	: Liquid.
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. Colorless. Amine-like. Flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Toxic to aquatic life.

Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Immediately 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 SIGMAGUARD 795 HARDENER

### Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 AQUATIC HAZARD (ACUTE) - Category 2</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 24.4%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 28.3%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 41.2%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the</li> </ul>
	aquatic environment: 36.6%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Toxic to aquatic life.</li> </ul>
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.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. 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 <sub>2</sub> , 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 severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. Prolonged or repeated contact may dry skin and cause irritation.
Symptoms related to the phy	sical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Environmental hazards	: Toxic to aquatic life.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

### Section 3. Composition/information on ingredients

Substance/mixture
Other means of
identification

: Mixture : 00123854

### CAS number/other identifiers

**CAS number** 

: Not applicable.

Ingredient name	%	CAS number
ylene isomers mixture	10 - <25	1330-20-7
N,N-diethyl-1,3-diaminopropane	10 - <25	104-78-9
benzyl alcohol	10 - <25	100-51-6
2-methylpropan-1-ol	1 - <10	78-83-1
m-phenylenebis(methylamine)	1 - <10	1477-55-0
ethylbenzene	1 - <10	100-41-4
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1 - <10	1760-24-3
salicylic acid	0.1 - <1	69-72-7
toluene	0.1 - <1	108-88-3

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	<ul> <li>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.</li> </ul>
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 recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

#### Most important symptoms/effects, acute and delayed

Eye contact	: Adverse symptoms may include the following: pain watering redness
Over-exposure signs/syn	nptoms
Ingestion	: Harmful if swallowed.
Skin contact	: Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Inhalation	: Harmful if inhaled.
Eye contact	: Causes serious eye damage.
Potential acute health eff	ects

### Section 4. First aid measures

Inhalation	:	No specific data.
Skin contact		Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	S	Adverse symptoms may include the following: stomach pains 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	: 1	No specific treatment.
Protection of first-aiders	i	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 <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable 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 toxic to aquatic life. 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 metal oxide/oxides Formaldehyde.
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

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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized 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".
Environmental precautions	:	Avoid dispersal of spilled 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.

#### Methods and materials 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 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

**Precautions for safe** ÷. 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 handling which this product is used. Avoid exposure - obtain special instructions before use. 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.

### Section 7. Handling and storage

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 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
📈 lene isomers mixture		GBZ 2.1 (China, 8/2019). [Xylene]
		PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
		PC-TWA: 50 mg/m <sup>3</sup> 8 hours.
2-methylpropan-1-ol		ACGIH TLV (United States, 1/2021).
		TWA: 152 mg/m <sup>3</sup> 8 hours.
		TWA: 50 ppm 8 hours.
m-phenylenebis(methylamin	e)	ACGIH TLV (United States, 1/2021).
		Absorbed through skin.
		C: 0.018 ppm
ethylbenzene		GBZ 2.1 (China, 8/2019).
		PC-STEL: 150 mg/m <sup>3</sup> 15 minutes.
		PC-TWA: 100 mg/m <sup>3</sup> 8 hours.
toluene		GBZ 2.1 (China, 8/2019). Absorbed
		through skin.
		PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
		PC-TWA: 50 mg/m <sup>3</sup> 8 hours.
Recommended monitoring procedures	atmosphere or biological mon of the ventilation or other cont protective equipment. Refere standards. Reference to natio	ients with exposure limits, personal, workplace itoring may be required to determine the effectiveness rol measures and/or the necessity to use respiratory nce should be made to appropriate monitoring onal guidance documents for methods for the ubstances will also be required.
Appropriate engineering controls	ventilation or other engineerin contaminants below any recor	ation. Use process enclosures, local exhaust g controls to keep worker exposure to airborne nmended or statutory limits. The engineering controls or dust concentrations below any lower explosive entilation equipment.
Environmental exposure controls	they comply with the requirem cases, fume scrubbers, filters	work process equipment should be checked to ensure ents of environmental protection legislation. In some or engineering modifications to the process o reduce emissions to acceptable levels.

#### Individual protection measures

Product name SIGMAGUARD 795 HARDENER

# Section 8. Exposure controls/personal protection

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	: 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.

# Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Colorless.
Odor	: Amine-like.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 28°C (82.4°F)
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)
Relative density	: 0.93
Bulk Density (g/cm <sup>3</sup> )	: 0.93
Solubility	: Insoluble in the following materials: cold water.
Auto-ignition temperature	: 225°C (437°F)
Viscosity	: Kinematic (40°C): >21 mm²/s
Viscosity	: 30 - <40 s (ISO 6mm)

# Section 10. Stability and reactivity

		•
Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
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 Formaldehyde. metal oxide/oxides

# Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
kylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
N,N-diethyl-1,3-diaminopropane	LD50 Dermal	Rabbit	524 mg/kg	-
	LD50 Oral	Rat	830 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
m-phenylenebis(methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female	000	
	LD50 Oral	Rat	930 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Irritation/Corrosion

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### Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene isomers mixture	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
N,N-diethyl- 1,3-diaminopropane	Skin - Visible necrosis	Rabbit	-	1 minutes	8 days
m-phenylenebis (methylamine)	Skin - Severe irritant	Rat	-	4 hours	4 hours

### Sensitization

• • • • • • • • • • • • • • • • • • •	Route of exposure	Species	Result
m-phenylenebis (methylamine)	skin	Mouse	Sensitizing

#### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

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

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

### Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
	Category 2 Category 2	-	-

### Aspiration hazard

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

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	÷	Causes serious eye damage.
Inhalation	÷	Harmful if inhaled.

### Section 11. Toxicological information

Skin contact	: Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
Symptoms related to the ph	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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
Delayed and immediate effe	cts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health ef	fects

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	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

### Numerical measures of toxicity

### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
					<b>D</b> 444

# Section 11. Toxicological information

SIGMAGUARD 795 HARDENER	1621.4	1242.7	59012.3	21.5	2
xylene isomers mixture	4300	1700	N/A	11	1.5
N,N-diethyl-1,3-diaminopropane	830	524	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
m-phenylenebis(methylamine)	930	2500	4500	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	N/A	N/A	11	1.5
salicylic acid	891	N/A	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A

### 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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
₩,N-diethyl- 1,3-diaminopropane	Acute EC50 30.2 mg/l	Daphnia	48 hours
1,5-diaminopropane	Acute EC50 146.6 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - Daphnia longispina - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
₩,N-diethyl- 1,3-diaminopropane	OECD 301A	90 % - Rea	90 % - Readily - 28 days			-
ethylbenzene	-	79 % - Rea	79 % - Readily - 10 days			-
Product/ingredient name	Aquatic half-lif	fe	Photolysis		Biodeg	<b>Jrada</b> bility
xylene isomers mixture N,N-diethyl-	-		-		Readily Readily	
1,3-diaminopropane benzyl alcohol	-		-		Readily	
ethylbenzene toluene	-		-  -		Readily Readily	

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### Section 12. Ecological information

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
ylene isomers mixture benzyl alcohol 2-methylpropan-1-ol m-phenylenebis (methylamine)	3.12 0.87 1 0.18	7.4 to 18.5 - - 2.69	low low low low
ethylbenzene salicylic acid toluene	3.6 2.21 to 2.26 2.73	79.43 - 8.32	low low low

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

**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	UN3470	UN3470	UN3470	UN3470
UN proper shipping name	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE
Transport hazard class(es)	8 (3)	8 (3)	8 (3)	8 (3)
Packing group	11	11	11	11
Environmental hazards	No.	No.	No.	No.

Product code000001011245Date of issue4 September 2022Version2.03Product nameSIGMAGUARD 795 HARDENER							
Section 14. Transport information							
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.			
Additional informat	ion						
CN :	None identified.						
UN :	None identified.						
IMDG :	None identified.						
IATA :	None identified.						
Section 15. I	<u> </u>	information	empted.				
			omptou.				
References			eople's Republic of China				

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	: 4 September 2022
Date of previous issue	: 10/5/2021
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### Product name SIGMAGUARD 795 HARDENER

### Section 16. Other information

Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous
	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.