# **SAFETY DATA SHEET**

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



Date of issue/Date of revision 17 December 2024

Version 1.06

131011	 December	LVLT	

Section 1. Chemical product and company identification		
Product code	: 00445028	
Product name	: SIGMAPRIME 700 LT HARDENER	
Product name	: SIGMAPRIME 700 LT HARDENER	
Product type	: Liquid.	
Relevant identified uses o	f 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. Characteristic. Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Toxic to aquatic life. Toxic to aquatic life with long lasting effects. Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

F 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 IN EYES: Immediately call a POISON CENTER or doctor.

#### See Section 12 for environmental precautions.

Product name SIGMAPRIME 700 LT HARDENER

## Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 18.7%</li> </ul>
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 22% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 62.1%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 18.7%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.</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. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. 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. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
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## Section 2. Hazards identification

	easy to do. Continue rinsing. Immediately call a	POISON CENTER or doctor.
Suitable extinguishing media	dry chemical, $CO_2$ , water spray (fog) or foam.	
Storage	e locked up. Store in a well-ventilated place. Kee	p cool.
Disposal	ose of contents and container in accordance with nternational regulations.	all local, regional, national
Physical and chemical hazards	mable liquid and vapor.	
Health hazards	be harmful if swallowed or in contact with skin. ( lamage. May cause an allergic skin reaction. C Iful if inhaled. Suspected of causing cancer. Ca Inged or repeated contact may dry skin and caus	auses serious eye damage. uses digestive tract burns.
Symptoms related to the phy	emical and toxicological characteristics	
Eye contact	rse symptoms may include the following: ring ess	
Inhalation	pecific data.	
Skin contact	rse symptoms may include the following: or irritation ess ess sing ring may occur	
Ingestion	rse symptoms may include the following: ach pains	
Delayed and immediate effect	Iso chronic effects from short and long term	exposure
Short term exposure	-	
Potential immediate effects	vailable.	
Potential delayed effects	wailable.	
<u>Long term exposure</u>		
Potential immediate effects	vailable.	
Potential delayed effects	vailable.	
Environmental hazards	to aquatic life. Toxic to aquatic life with long las	sting effects.
Other hazards which do not result in classification	es digestive tract burns. Prolonged or repeated e irritation.	contact may dry skin and

## Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### **CAS number/other identifiers**

**CAS number** : Not applicable.

Ingredient name	%	CAS number
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil	10 - <25	68082-29-1
fatty acids and triethylenetetramine		
xylene isomers mixture	10 - <25	1330-20-7
Phenol, methylstyrenated	10 - <25	68512-30-1
1-methoxy-2-propanol	1 - <10	107-98-2
2-methylpropan-1-ol	1 - <10	78-83-1
2,4,6-tris(dimethylaminomethyl)phenol	1 - <10	90-72-2
ethylbenzene	1 - <10	100-41-4
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	1 - <10	445498-00-0
3,6-diazaoctanethylenediamin	1 - <10	112-24-3

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

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Inhalation	: No specific data.
Eye contact	: Adverse symptoms may include the following: pain watering redness
Over-exposure signs/sy	
Ingestion	: May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.
	May cause an allergic skin reaction.
Skin contact	: Causes severe burns. May be harmful in contact with skin. Defatting to the skin.
Inhalation	: Harmful if inhaled.
Eye contact	: Causes serious eye damage.
Potential acute health e	
Most important symptom	s/effects, acute and delayed
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
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.
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>
Eye contact	water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

#### Product name SIGMAPRIME 700 LT HARDENER

### Section 4. First aid measures

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
Indication of immediate me	ical 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 <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 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 halogenated compounds
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

### Section 6. Accidental release measures

Personal precautions,	protective equipment and	l 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. Collect spillage.

#### 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 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. 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.
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### Section 7. Handling and storage

Conditions for safe storage,	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in
including any	accordance with local regulations. Store in a segregated and approved area. Store
incompatibilities	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**

procedures       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.         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.         ndividual protection 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.	Ingredient name		Exposure limits
1-methoxy-2-propanol       ACGIH TLV (United States, 7/2023)         TWA & hours: 50 ppm.       TWA & hours: 50 ppm.         2-methylpropan-1-ol       STEL 15 minutes: 100 ppm.         2-methylpropan-1-ol       ACGIH TLV (United States, 7/2023)         TWA & hours: 50 ppm.       STEL 15 minutes: 309 mg/m <sup>3</sup> .         ethylbenzene       GBZ 2.1 (China, 11/2022)         PC-TWA & hours: 100 mg/m <sup>3</sup> .         PC-TWA & hours: 100 mg/m <sup>3</sup> .         Procedures         acontrols         controls	xylene		PC-TWA 8 hours: 50 mg/m <sup>3</sup> .
2-methylpropan-1-ol       STEL 15 minutes: 369 mg/m³.         2-methylpropan-1-ol       ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm. TWA 8 hours: 152 mg/m³.         ethylbenzene       GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m³. PC-STEL 15 minutes: 150 mg/m³.         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.         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.         ndividual protection 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 hot be allowed out of the workplace. Wash 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.	1-methoxy-2-propanol		ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm. TWA 8 hours: 184 mg/m <sup>3</sup> .
ethylbenzene       GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m³. PC-STEL 15 minutes: 150 mg/m³.         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.         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.         ndividual protection 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 clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.	2-methylpropan-1-ol		STEL 15 minutes: 369 mg/m <sup>3</sup> . ACGIH TLV (United States, 7/2023) TWA 8 hours: 50 ppm.
procedures       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.         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.         ndividual protection 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.	ethylbenzene		GBZ 2.1 (China, 11/2022) PC-TWA 8 hours: 100 mg/m <sup>3</sup> .
<ul> <li>controls</li> <li>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.</li> <li>Environmental exposure controls</li> <li>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.</li> <li>Mash 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.</li> </ul>		national guidance documents for me	
controlsthey 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.ndividual protection measures*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.		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	
<ul> <li>Hygiene measures</li> <li>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.</li> </ul>		they comply with the requirements c cases, fume scrubbers, filters or en	of environmental protection legislation. In some gineering modifications to the process
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.	dividual protection measures	ž	
Eye protection : Chemical splash goggles and face shield.	Hygiene measures	eating, smoking and using the lavate Appropriate techniques should be u Contaminated work clothing should contaminated clothing before reusing	ory and at the end of the working period. sed to remove potentially contaminated clothing. not be allowed out of the workplace. Wash g. Ensure that eyewash stations and safety
	Eye protection	Chemical splash goggles and face s	shield.

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## Section 8. Exposure controls/personal protection

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	: nitrile neoprene
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	<ul> <li>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.</li> </ul>
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	plorless.		
Odor	naracteristic.		
Boiling point	37.78°C (>100°F)		
Flash point	osed cup: 29°C (84.2°F)		
Lower and upper explosive (flammable) limits	ot available.		
Relative density	97		
Solubility(ies)	edia Result		
oolubility(103)	old water Not soluble		
Viscosity	, ynamic (room temperature): Not available. nematic (room temperature): Not available. nematic (40°C): >21 mm²/s		

### 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 halogenated compounds

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
dimers, oligomeric reaction				
products with tall-oil fatty acids				
and triethylenetetramine				
	LD50 Oral	Rat	>2000 mg/kg	-
xylene isomers mixture	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 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	-
2,4,6-tris(dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 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	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

Irritation/Corrosion

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## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
xylene isomers mixture	Skin - Irritant Skin - Moderate irritant	Human Rabbit	-	- 24 hours 500 mg	-

#### **Sensitization**

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitizing
3,6-diazaoctanethylenediamin	skin	Guinea pig	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
	Category 3		Narcotic effects
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
ethylbenzene	ASPIRATION HAZARD - Category 1

#### Information on the likely : Not available.

routes of exposure

#### Potential acute health effects

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### Section 11. Toxicological information

Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.

#### Symptoms related to the physical, 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 effects 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 eff	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

### 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)
GMAPRIME 700 LT HARDENER	2491.2	2433.6	N/A	20.6	2.6
Fatty acids, C18-unsatd., dimers, oligomeric	2500	2500	N/A	N/A	N/A
reaction products with tall-oil fatty acids and triethylenetetramine					
xylene isomers mixture	4300	1700	N/A	11	1.5
Phenol, methylstyrenated	2500	2500	N/A	N/A	N/A
1-methoxy-2-propanol	5200	13000	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
ethylbenzene	3500	17800	N/A	17.8	1.5
Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol	500	N/A	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	1716	1465	N/A	N/A	N/A

#### Other information

Zauses digestive tract burns. 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. 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**

esult	Species	Exposure
C10 1.78 mg/l	Algae	72 hours
cute LC50 23300 mg/l	Daphnia	48 hours
cute LC50 >4500 mg/l Fresh water	Fish	96 hours
cute EC50 1100 mg/l	Daphnia	48 hours
cute LC50 >100 mg/l	Daphnia	48 hours
Ũ	•	
cute LC50 >100 mg/l cute EC50 1.8 mg/l Fresh water	Fish Daphnia	96 hours 48 hours
	ute LC50 23300 mg/l ute LC50 >4500 mg/l Fresh water ute EC50 1100 mg/l ute LC50 >100 mg/l ute LC50 >100 mg/l	in 1.78 mg/lAlgaeute LC50 23300 mg/l ute LC50 >4500 mg/l Fresh water ute EC50 1100 mg/l ute LC50 >100 mg/lDaphnia Daphnia Daphniaute LC50 >100 mg/l ute EC50 1.8 mg/l Fresh waterFish Daphnia

#### Persistence/degradability

Product name SIGMAPRIME 700 LT HARDENER

### Section 12. Ecological information

	<u> </u>				
Product/ingredient name	Test	Result		Dose	Inoculum
2,4,6-tris (dimethylaminomethyl)phenol	OECD 301D Ready Biodegradability - Closed Bottle Test	4 % - Not re	eadily - 28 days	-	-
ethylbenzene	-	79 % - Rea	idily - 10 days	-	-
Product/ingredient name	Aquatic half-life		Photolysis		Biodegradability
Atty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine xylene isomers mixture 2,4,6-tris	-		-		Not readily Readily Not readily
(dimethylaminomethyl)phenol ethylbenzene	-		-		Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Vene isomers mixture	3.12	7.4 to 18.5	Low
Phenol, methylstyrenated	3.627	-	Low
1-methoxy-2-propanol	<1	-	Low
2-methylpropan-1-ol	1	-	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
ethylbenzene	3.6	79.43	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

<u>Mobility in soil</u>	
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

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### Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	China	UN	IMDG	ΙΑΤΑ
UN number	UN3469	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
Packing group	ш	Ш	111	Ш
Environmental hazards Marine pollutant	Yes. The environmentally hazardous substance mark is not required. Not applicable.	Yes. The environmentally hazardous substance mark is not required. Not applicable.	Yes. (Polyamide)	Yes. The environmentally hazardous substance mark is not required. Not applicable.
substances				

#### Additional information

CN	: None identified.
UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not applicable. to IMO instruments

### Section 15. Regulatory information

China inventory (IECSC)	: All components are listed or exempted.
References	<ul> <li>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/</li> </ul>

### Section 15. Regulatory information

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

Date of issue/Date of revision	: 17 December 2024
Date of previous issue :	: 10/24/2023
Version	: 1.06
	EHS
Key to abbreviations :	<ul> <li>ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway</li> <li>ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road</li> <li>ATE = Acute Toxicity Estimate</li> <li>BCF = Bioconcentration Factor</li> <li>GHS = Globally Harmonized System of Classification and Labelling of Chemicals</li> <li>IATA = International Air Transport Association</li> <li>IMDG = International Maritime Dangerous Goods</li> <li>LogPow = logarithm of the octanol/water partition coefficient</li> <li>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)</li> <li>RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail</li> <li>UN = United Nations</li> </ul>

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.