# **SAFETY DATA SHEET**



Date of issue/Date of revision 3 January 2024 Version 1

# Section 1. Identification of the substance/mixture and of the company/undertaking

Product code	: 00268364
Product name	: SIGMACOVER 350 LT HARDENER
Other means of identification	: Not available.
Product type	: Liquid.

Relevant identified uses of the substance or mixture and uses advised against		
Product use	Coating. Professional applications, Used by spraying.	
Uses advised against	: Product is not intended, labelled or packaged for consumer use.	
Supplier's details	: PPG Coatings (Thailand) Co., Ltd. 15 Rama 9 Road, Kwaeng Huamark, Khet Bangkapi, Bangkok 10240 Thailand T: 662-319-4190 #224 F: 662-319-4189	
Emergency telephone number (with hours of operation)	: CHEMTREC 001-800-13-203-9987 (CCN 17704)	

# Section 2. Hazards identification

ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory trac irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2	Classification of the substance or mixture	SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory trac irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 2	t
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# Section 2. Hazards identification

Product name SIGMACOVER 350 LT HARDENER

	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 25.9%
	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 31%
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 55%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 38%
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor. Harmful if swallowed or if inhaled. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. 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	: Collect spillage. 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.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

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 fatty acids and triethylenetetramine	10- <20	68082-29-1
xylene	10- <20	1330-20-7
2-methylpropan-1-ol	10- <20	78-83-1
benzyl alcohol	10- <20	100-51-6
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	5- <10	445498-00-0
2,4,6-tris(dimethylaminomethyl)phenol	3 - <5	90-72-2
ethylbenzene	1- <3	100-41-4
3,6-diazaoctanethylenediamin	1- <3	112-24-3

There are no 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.

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

# Section 4. First aid measures

Product name SIGMACOVER 350 LT HARDENER

Eye contact: Adverse symptoms may include the following: pain watering rednessInhalation: Adverse symptoms may include the following: respiratory tract irritation coughingSkin contact: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occurIngestion: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occurIndication of immediate medical attention and special treatment needed, if necessaryNotes 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 especific 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.		
Skin contact: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occurIngestion: Adverse symptoms may include the following: storacking blistering may occurIndication of immediate medical 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 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	Eye contact	pain watering
pain or irritation redness dryness cracking 	Inhalation	respiratory tract irritation
stomach painsIndication of immediate medical attention and special treatment needed, if necessaryNotes 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	Skin contact	pain or irritation redness dryness cracking
<ul> <li>Notes to physician</li> <li>In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</li> <li>Specific treatments</li> <li>No specific treatment.</li> <li>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</li> </ul>	Ingestion	
<ul> <li>Specific treatments</li> <li>Protection of first-aiders</li> <li>The exposed person may need to be kept under medical surveillance for 48 hours.</li> <li>No specific treatment.</li> <li>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</li> </ul>	Indication of immediate med	lical attention and special treatment needed, if necessary
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	Notes to physician	
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	Specific treatments	: No specific treatment.
	Protection of first-aiders	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

# 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

### Section 5. Fire-fighting measures

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, protect	tiv	e 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. 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.

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Section 7. Handling and storage

Product name SIGMACOVER 350 LT HARDENER

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. 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	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			
xylene 2-methylpropan-1-ol	Ministry of Labor (Thailand, 8/2017) [xylene (o-, m-, p- isomers)] TWA: 100 ppm 8 hours. ACGIH TLV (United States, 1/2023). TWA: 152 mg/m <sup>3</sup> 8 hours.			
ethylbenzene	TWA: 50 ppm 8 hours. Ministry of Labor (Thailand, 8/2017) TWA: 100 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.			
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to they comply with the requirements of environmental protection legislation. In cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
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# Section 8. Exposure controls/personal protection

#### Individual 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.		
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	: 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	: 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

Appearance	
Physical state	: Liquid.
Color	: Not available.
Odor	: Amine-like.
Odor threshold	: Not available.
рН	: insoluble in water.
Melting point	<ul> <li>May start to solidify at the following temperature: 12°C (53.6°F) This is based on data for the following ingredient: 3,6-diazaoctanethylenediamin. Weighted average: -66.63°C (-87.9°F)</li> </ul>
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 29°C (84.2°F)

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# Section 9. Physical and chemical properties

<b>y</b>		• •				
Evaporation rate	:	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.52compared with butyl acetate				
Flammability (solid, gas)	1	iquid				
Lower and upper explosive (flammable) limits	:	Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)				
Vapor pressure	1	lighest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Veighted average: 0.55 kPa (4.13 mm Hg) (at 20°C)				
Vapor density	:	Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Weighted average: 3.4 (Air = 1)				
Relative density	1	0.95				
Solubility/ico)		Media Result				
Solubility(ies)		cold water Not soluble				
Partition coefficient: n- octanol/water	:	Not applicable.				
Auto-ignition temperature	1	Lowest known value: 337.78°C (640°F) (3,6-diazaoctanethylenediamin).				
Decomposition temperature	:	Stable under recommended storage and handling conditions (see Section 7).				
Viscosity	:	Kinematic (40°C): >21 mm²/s				
Viscosity	:	60 - 100 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

Product name SIGMACOVER 350 LT HARDENER

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall- oil fatty acids and	LD50 Dermal	Rat	>2000 mg/kg	-
triethylenetetramine	LD50 Oral	Rat	>2000 mg/kg	
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 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	-
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	-
2,4,6-tris(dimethylaminomethyl) phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	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	-

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triatbulenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
triethylenetetramine	Skin - Irritant	Human	_	_	
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
2,4,6-tris	Skin - Visible necrosis	Rabbit	-	4 hours	7 days
(dimethylaminomethyl) phenol					
Conclusion/Summary					
Skin :	There are no data availab	le on the mixtu	re itself.		
Eyes :	There are no data availab	le on the mixtu	re itself.		
Beenivetern/	There are no data availabl	le en the mivtu	ra itaalf		

: There are no data available on the mixture itself.

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# Section 11. Toxicological information

	Product/ingredient name	Route of exposure	Species	Result		
	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 3,6-diazaoctanethylenediamin	skin	Mouse Guinea pig	Sensitizing		
	•	onan		Cononizing		
	Conclusion/Summary					
	Skin :	There are no data	available on the mixture itself.			
	Respiratory :	There are no data	available on the mixture itself.			
	<u>Mutagenicity</u>					
	Conclusion/Summary :	There are no data	available on the mixture itself.			
9	Carcinogenicity					
	Conclusion/Summary :	There are no data	available on the mixture itself.			
I	Reproductive toxicity					
	Conclusion/Summary :	clusion/Summary : There are no data available on the mixture itself.				
]	Teratogenicity					
	Conclusion/Summary :	There are no data	available on the mixture itself.			

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

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

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

Name	•••	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### **Aspiration hazard**

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

Information on the likely	1	Not available.
routes of exposure		
Potential acute health effects		

#### Potential acute health effects

Eye contact

: Causes serious eye damage.

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# Section 11. Toxicological information

Inhalation	:	Harmful if inhaled. May cause respiratory irritation.
Skin contact	1	Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	1	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	: Adverse symptoms may include the following: respiratory tract irritation coughing
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

<u>Short term exposure</u>	
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	<u>'fects</u>
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	: No known significant effects or critical hazards.
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

Route	ATE value
Oral	1806.07 mg/kg
Dermal	2132.39 mg/kg
Inhalation (vapors)	29.47 mg/l
Inhalation (dusts and mists)	2.26 mg/l

#### Other information

Causes 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.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
ethylbenzene	-	79 % - Rea	dily - 10 days	-	-
Conclusion/Summary	: There a	are no data available	on the mixture if	self.	
Product/ingredient name	Aquatic ha	alf-life	Photoly	vsis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine xylene benzyl alcohol ethylbenzene	- - -		- - -		Not readily Readily Readily Readily

#### **Bioaccumulative potential**

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## Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
benzyl alcohol	0.87	-	Low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	Low
ethylbenzene	3.6	79.43	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	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 availed or minimized wherever people
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.

# Section 14. Transport information

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

### Section 14. Transport information

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 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

Harmful Chemicals List	1	Listed
Safety, health and environmental regulations specific for the product	:	No known specific national and/or regional regulations applicable to this product (including its ingredients).
International regulations		

International regulations

Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 3 January 2024
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: EHS
Key to abbreviations	<ul> <li>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,</li> </ul>

### Section 16. Other information

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.