## **SAFETY DATA SHEET**



Date of issue/Date of revision 10 May 2024 Version 9.01

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

Product code	: 00294292	
Product name	: AMERCOAT 68HS BASE GREY	
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

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (oral) - Category 5
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1B
	CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -
	Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	AQUATIC HAZARD (ACUTE) - Category 3
	AQUATIC HAZARD (LONG-TERM) - Category 3

#### Product name AMERCOAT 68HS BASE GREY

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 28%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 65.2%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 45.8%

GHS label elements	
Hazard pictograms	:

Hazard pictograms	
Signal word	: Warning
Hazard statements	<ul> <li>Flammable liquid and vapor. May be harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful 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. Use personal protective equipment as required. 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. Do not breathe vapor. 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. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. IF ON SKIN: 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. If eye irritation persists: Get medical advice or attention.
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.

Product name AMERCOAT 68HS BASE GREY

#### Section 2. Hazards identification

**Other hazards which do not** : Prolonged or repeated contact may dry skin and cause irritation. **result in classification** 

#### Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### CAS number/other identifiers

#### **CAS number** : Not applicable.

Ingredient name	%	CAS number
bis-[4-(2,3-epoxipropoxi)phenyl]propane	10- <20	1675-54-3
Epoxy Resin (700 <mw<=1100)< td=""><td>10- &lt;20</td><td>25036-25-3</td></mw<=1100)<>	10- <20	25036-25-3
4-methylpentan-2-one	10- <20	108-10-1
crystalline silica, respirable powder (<10 microns)	5- <10	14808-60-7
heptan-2-one	5- <10	110-43-0
Solvent naphtha (petroleum), light aromatic	5- <10	64742-95-6
xylene	3 - <5	1330-20-7
Cashew, nutshell liq., oligomeric reaction products with 1-chloro-	3 - <5	68413-24-1
2,3-epoxypropane		
1,2,4-trimethylbenzene	1- <3	95-63-6
tetraethyl silicate	1- <3	78-10-4
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	1- <3	2530-83-8

#### 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 measuresEye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the<br/>eyelids apart for at least 10 minutes and seek immediate medical advice.Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is<br/>irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by<br/>trained personnel.Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and<br/>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.<br/>Keep person warm and at rest. Do NOT induce vomiting.

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

Potential acute health ef	ffects
Eye contact	: Causes serious eye irritation.
Inhalation	<ul> <li>Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.</li> </ul>
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs/sy	<u>mptoms</u>

#### Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

Indication of immediate med	lica	I attention and special treatment needed, if necessary
Notes to physician	-	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	1	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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/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, protecti	tive 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. Avoid breathing 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 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.
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**

-methylpentan-2-one	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.
	TWA: 100 ppm 8 hours.
amentalling alling magninghle manufan ( 440 mignang)	
crystalline silica, respirable powder (<10 microns)	Ministry of Labor (Thailand, 8/2017).
	[crystalline silica]
	TWA: 0.025 mg/m <sup>3</sup> 8 hours. Form:
	Respirable dust
heptan-2-one	ACGIH TLV (United States, 7/2023).
	TWA: 233 mg/m <sup>3</sup> 8 hours.
	TWA: 50 ppm 8 hours.
xylene	Ministry of Labor (Thailand, 8/2017).
	[xylene (o-, m-, p- isomers)]
	TWA: 100 ppm 8 hours.
1,2,4-trimethylbenzene	ACGIH TLV (United States, 7/2023).
	TWA: 10 ppm 8 hours.
tetraethyl silicate	Ministry of Labor (Thailand, 8/2017).
	TWA: 100 ppm 8 hours.

Version 9.01

Product name AMERCOAT 68HS BASE GREY

#### Section 8. Exposure controls/personal protection

Appropriate engineering controls Environmental exposure 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. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measured	res	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye protection	1	Chemical splash goggles.
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	1	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

Appearance					
Physical state	:	Liquid.			
Color	:	Gray.			
Odor	:	Aromatic.			
Odor threshold	:	Not available.			
рН	:	insoluble in water.			
Melting point	:	May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane. Weighted average: -39.17°C (-38.5°F)			
Boiling point	:	>37.78°C (>100°F)			
Flash point	:	Closed cup: 41°C (105.8°F)			
Evaporation rate	:	Highest known value: 1.7 (4-methylpentan-2-one) Weighted average: 1.07compared with butyl acetate			
Flammability (solid, gas)	:	liquid			
Lower and upper explosive (flammable) limits	:	Greatest known range: Lower: 1.3% Upper: 23% (tetraethyl silicate)			
Vapor pressure	:	Highest known value: 2.1 kPa (15.8 mm Hg) (at 20°C) (4-methylpentan-2-one). Weighted average: 0.7 kPa (5.25 mm Hg) (at 20°C)			
Vapor density	:	Ħ́ighest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane). Weighted average: 6.87 (Air = 1)			
Relative density	:	1.18			
		Media Result			
Solubility(ies)	ł	cold water Not soluble			
Partition coefficient: n- octanol/water	:	Not applicable.			
Auto-ignition temperature	:	Lowest known value: 280 to 470°C (536 to 878°F) (Solvent naphtha (petroleum), light aromatic).			
Decomposition temperature	:	Stable under recommended storage and handling conditions (see Section 7).			
Viscosity	:	Kinematic (40°C): >21 mm²/s			

#### Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its 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.

Date of issue 10 May 2024

Version 9.01

Product name AMERCOAT 68HS BASE GREY

#### Section 10. Stability and reactivity

Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

#### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pís-[4-(2,3-epoxipropoxi)phenyl] propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>&gt;2000 mg/kg</td><td>-</td></mw<=1100)<>	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
heptan-2-one	LC50 Inhalation Vapor	Rat	16.7 mg/l	4 hours
	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Cashew, nutshell liq., oligomeric reaction products with 1-chloro-	LD50 Dermal	Rabbit	>2 g/kg	-
2,3-epoxypropane				
	LD50 Oral	Rat	5 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-
tetraethyl silicate	LC50 Inhalation Dusts and mists	Rat	10 to 16 mg/l	4 hours
	LD50 Dermal	Rabbit	5.878 g/kg	-
	LD50 Oral	Rat	6270 mg/kg	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	LC50 Inhalation Dusts and mists	Rat	>5.3 mg/l	4 hours
,	LD50 Oral	Rat	7.01 g/kg	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### Irritation/Corrosion

Hazardous decomposition
 : Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

#### Date of issue 10 May 2024

Version 9.01

Product name AMERCOAT 68HS BASE GREY

#### Section 11. Toxicological information

Product/ingredient name	Result		Species	Score	e Ex	posure	Observation
øs-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Mild irritant	t	Rabbit	-	24	hours	-
	Eyes - Redness o conjunctivae	f the	Rabbit	0.4	24	hours	-
	Skin - Edema		Rabbit	0.5	4 h	ours	-
	Skin - Erythema/E	Eschar	Rabbit	0.8		ours	-
	Skin - Mild irritant		Rabbit	-	4 h	ours	-
xylene	Skin - Moderate ir	ritant	Rabbit	-	24 l mg	hours 500	-
Conclusion/Summary							
Skin :	There are no data	available	e on the mixture	e itself.			
Eyes :	There are no data	available	e on the mixture	e itself.			
Respiratory :	There are no data	available	e on the mixture	e itself.			
Sensitization							
Product/ingredient name	Route of exposure	Specie	S		Result		
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse			Sensitizin	g	
Conclusion/Summary							
Skin :	There are no data	available	e on the mixture	e itself.			
Respiratory :	There are no data	available	e on the mixture	e itself.			
<u>Iutagenicity</u>							
Conclusion/Summary :	There are no data	available	e on the mixture	e itself.			
Carcinogenicity							
Conclusion/Summary :	There are no data	available	e on the mixture	e itself.			
Reproductive toxicity							
Conclusion/Summary :	There are no data	available	e on the mixture	e itself.			
eratogenicity							
Conclusion/Summary :	There are no data	available	e on the mixture	e itself.			
Specific target organ toxicit	<u>y (single exposure</u>	e)					
Name			Category	Route o	of	Target o	rgans

Name	Category	Route of exposure	Target organs
4-methylpentan-2-one	Category 3	-	Narcotic effects
heptan-2-one	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation
tetraethyl silicate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

#### Section 11. Toxicological information

Name		Route of exposure	Target organs
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-

#### Aspiration hazard

Name	Result
4-methylpentan-2-one	ASPIRATION HAZARD - Category 2
heptan-2-one	ASPIRATION HAZARD - Category 2
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1

Information on the likely	: Not available.
routes of exposure	

#### Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	<ul> <li>Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.</li> </ul>
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed. Can cause central nervous system (CNS) depression.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion :	No specific data.

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.		

#### Section 11. Toxicological information

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

#### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
	4148.57 mg/kg
Dermal	6909.77 mg/kg
Inhalation (vapors)	15.8 mg/l
Inhalation (dusts and mists)	2.03 mg/l

#### Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. 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. Avoid contact with skin and clothing.

#### Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi)	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
phenyl]propane			
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
4-methylpentan-2-one	Acute LC50 >179 mg/l	Fish	96 hours
heptan-2-one	Acute LC50 131 mg/l	Fish	96 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Acute EC50 255 mg/l Fresh water	Algae	72 hours
	Acute EC50 473 mg/l	Daphnia	48 hours
	Acute LC50 55 mg/l	Fish	96 hours

Thailand Page: 12/15

#### Section 12. Ecological information

Conclusion/Summary

: There are no data available on the mixture itself.

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
<ul> <li>methylpentan-2-one</li> <li>heptan-2-one</li> <li>[3-(2,3-epoxypropoxy)propyl]</li> <li>trimethoxysilane</li> </ul>	OECD 301F OECD 310 -	83 % - Readily - 28 69 % - Readily - 28 37 % - Not readily -	days	- - -	
Conclusion/Summary	: There are no c	lata available on the	mixture itse	lf.	
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
bis-[4-(2,3-epoxipropoxi) phenyl]propane 4-methylpentan-2-one heptan-2-one xylene [3-(2,3-epoxypropoxy)propyl] trimethoxysilane			- - -		Not readily Readily Readily Readily Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
4-methylpentan-2-one	1.9	-	Low
heptan-2-one	2.26	-	Low
xylene	3.12	7.4 to 18.5	Low
1,2,4-trimethylbenzene	3.63	120.23	Low
tetraethyl silicate	3.18	-	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
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Thailand Page: 13/15

#### Section 13. Disposal considerations

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

#### Section 14. Transport information

			1070
	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
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.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	Not applicable.

# Additional information UN : None identified. IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. IATA : 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 Safety, health and environmental regulations

Listed
No known specific national and/or regional regulations applicable to this product (including its ingredients).

### specific for the product 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	: 10 May 2024
Date of previous issue	: 12/13/2023
Version	: 9.01
Prepared by	: 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 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.