# **SAFETY DATA SHEET**



Date of issue/Date of revision 15 March 2024

Version 1.04

Section 1. Identification					
Product code	: 000001195840				
Product name	: SIGMACOVER 256 BASE (TINTED)				
Other means of identification	Other means of identification				
00175850; 00175851; 00175	5853; 00175854				
Product type	: Liquid.				
Relevant identified uses of the substance or mixture and uses advised against					
Product use	Coating. Professional applications, Used by spraying.				
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737				
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)				

# Section 2. Hazards identification

Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 2

**GHS** label elements, including precautionary statements



### Section 2. Hazards identification

Hazard statements	11	Flammable liquid and vapor.
		Causes skin irritation.
		May cause an allergic skin reaction.
		Causes serious eye irritation.
		Harmful if inhaled.
		May cause respiratory irritation.
		Toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.
Response	:	Collect spillage. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it 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 in a well-ventilated place. Keep container tightly closed.
		Not applicable.

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

CAS number EC number	<ul><li>Not applicable.</li><li>Mixture.</li></ul>		
Ingredient name		%	CAS number
Epoxy Resin		20 - <25	SUB110652
xylene		10 - <20	1330-20-7
Talc , not containing asbestiform fibres		10 - <20	14807-96-6
trizinc bis(orthophosphate)		5 - <10	7779-90-0
Epoxy resin (MW ≤ 700)		5 - <10	25068-38-6
ethylbenzene		1 - <3	100-41-4
2-methoxy-1-methylethyl acetate		1 - <3	108-65-6
		0.3 - <1	911674-82-3
and 1,3-phenylenedimet	hanamine		
4-nonylphenol, branched		0.3 - <1	84852-15-3

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.

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### Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>
Inhalation	<ul> <li>Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing i 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.

lost important symptor	<u>ms/effects, acute and delayed</u>
Potential acute health	effects
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/s</u>	<u>ymptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

indication of ininediate met	lica	<u>n attention and special treatment needed, it necessary</u>
Notes to physician	1	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)

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

### Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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. Collect spillage.		

Methods and materials for containment and cleaning up

Product name SIGMACOVER 256 BASE (TINTED)

### Section 6. Accidental release measures

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	I				
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with 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 ing Avoid breathing vapor or mist. 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 compatibl material, kept tightly closed when not in use. Store and use away from heat, spa open flame or any other ignition source. Use explosion-proof electrical (ventilati lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retaproduct residue and can be hazardous. Do not reuse container.				
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.			
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**

Talc , not containing asbestiform fibresPEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m³ 8 hours. PEL (long term): 100 ppm 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 125 ppm 15 minutes. PEL (long term): 125 ppm 3 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m³ 15 minutes. PEL (long term): 100 ppm 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 125 ppm 15 minutes. PEL (long term): 100 ppm 8 hours. ACGIH TLV (United States). TWA: 3 mg/m³, (Respirable fraction)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 cor 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 er they comply with the requirements of environmental protection legislation. In sc cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	Ingredient name		Exposure limits
Tale , not containing asbestiform fibresWorkplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 243 mg/m³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m³ 15 minutes. PEL (long term): 125 ppm 15 minutes. PEL (long term): 120 ppm 8 hours. Accil at 1,3-phenylenedimethanamineRecommended 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 cor 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 er they comply with the requirements of environmental protection legislation. In so cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.Individual protection measures Hygiene measures:Wash hands, forearms and face thoroughly after handling chemical products, b eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated cod	vylene		(Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m <sup>3</sup> 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 8 hours.
ethylbenzenePEL (long term): 2 mg/m³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 100 ppm 8 hours. PEL (long term): 100 ppm 8 hours. 	Talc , not containing asbestifor	m fibres	Workplace Safety and Health Act
ethylbenzeneWorkplace Safety and Health Act (Singapore, 2/2006).PEL (short term): 523 mg/m³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 100 ppm 8 hours. ACGIH TLV (United States). TWA: 3 mg/m³, (Respirable fraction)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. untilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering con also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Environmental exposure controls:Wash hands, forearms and face thoroughly after handling chemical products, b eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot			
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine       ACGIH TLV (United States). TWA: 3 mg/m³, (Respirable fraction)         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 cor 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 er they comply with the requirements of environmental protection legislation. In sec cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection measures       : Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot	ethylbenzene		Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m <sup>3</sup> 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m <sup>3</sup> 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 cortalso 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 er they comply with the requirements of environmental protection legislation. In so cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection measures       : Wash hands, forearms and face thoroughly after handling chemical products, b eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot			ACGIH TLV (United States).
proceduresnational 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 cor 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 er they comply with the requirements of environmental protection legislation. In so cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.Individual protection measures Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, b eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot	acid and 1,3-phenylenedimetha	anamine	TWA: 3 mg/m <sup>3</sup> , (Respirable fraction)
<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 corr 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 er they comply with the requirements of environmental protection legislation. In so cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.</li> <li>Individual protection measures</li> <li>Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot</li> </ul>	procedures	national guidance documents for met substances will also be required.	hods for the determination of hazardous
controls       they comply with the requirements of environmental protection legislation. In so cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection measures       .         Hygiene measures       .         Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot		ventilation or other engineering contro contaminants below any recommender also need to keep gas, vapor or dust	ols to keep worker exposure to airborne ed or statutory limits. The engineering controls concentrations below any lower explosive
<ul> <li>Hygiene measures</li> <li>Wash hands, forearms and face thoroughly after handling chemical products, be eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clot</li> </ul>		they comply with the requirements of cases, fume scrubbers, filters or engi	environmental protection legislation. In some neering 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 clot	ndividual protection measures	2	
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.	Hygiene measures	eating, smoking and using the lavator Appropriate techniques should be use Contaminated work clothing should n contaminated clothing before reusing	y and at the end of the working period. ed to remove potentially contaminated clothing. ot be allowed out of the workplace. Wash Ensure that eyewash stations and safety
Eye/face protection : Chemical splash goggles.	Eye/face protection	Chemical splash goggles.	
Skin protection	Skin protection		

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### Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	: butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	<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

<b>Appearance</b>		
Physical state	Liquid.	
Color	Various	
Odor	Aromatic.	
рН	Not applicable.	
Boiling point	>37.78°C (>100°F)	
Flash point	Closed cup: 26°C (78.8°F)	
Evaporation rate	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.78compared with butyl acetate	ı
Flammability (solid, gas)	liquid	
Vapor pressure	Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.89 kPa (6.68 mm Hg) (at 20°C)	
Vapor density	Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). Weighted average: 3.79 (Air = 1)	
Relative density	1.44	
Colubility/ico)	Media Result	
Solubility(ies)	cold water Not soluble	
Auto-ignition temperature	Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).	

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### **Section 9. Physical and chemical properties**

Viscosity

: Kinematic (room temperature): >400 mm<sup>2</sup>/s (>400 cSt) Kinematic (40°C (104°F)): >21 mm<sup>2</sup>/s (>21 cSt)

### 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 phosphorus oxides halogenated compounds metal oxide/ oxides

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and mists	Rat	>5.7 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
Epoxy resin (MW  ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/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	-
2-methoxy-1-methylethyl	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
acetate			_	
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and		Rat	>5.08 mg/l	4 hours
1,3-phenylenedimethanamine		D.1.1.1	0.4.4	
4-nonylphenol, branched	LD50 Dermal LD50 Oral	Rabbit Rat	2.14 g/kg 1300 mg/kg	-

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

#### Irritation/Corrosion

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### Section 11. Toxicological information

Product/ingredient name	Result		Species	Scor	е	Exposure	Observation
<b>x</b> ylene	Skin - Moderate	irritant	Rabbit	-		24 hours 50	- 00
Epoxy resin (MW ≤ 700)	Eyes - Mild irritar	nt	Rabbit	_		mg -	_
	Skin - Mild irritan		Rabbit	-		-	-
4-nonylphenol, branched	Skin - Erythema/	Eschar	Rabbit	4		-	-
Conclusion/Summary							
Skin :	There are no data	available o	n the mixtur	e itself.			
Eyes :	There are no data	available o	n the mixtur	e itself.			
Respiratory :	There are no data	available o	n the mixtur	e itself.			
Sensitization							
Product/ingredient name	Route of	<b>Species</b>			Resu	lt	
	exposure						
Epoxy resin (MW  ≤ 700)	skin	Mouse			Sens	itizing	
Conclusion/Summary	- 1						
Skin :	There are no data	available o	n the mixtur	e itself.			
Respiratory :	There are no data	available o	n the mixtur	e itself.			
<u>Mutagenicity</u>							
Conclusion/Summary :	There are no data	a available o	on the mixtu	re itself			
Carcinogenicity							
	There are no data	a available o	on the mixtu	re itself			
Reproductive toxicity							
	There are no data	a available (	on the mixtu	re itself			
<u>Feratogenicity</u>							
	There are no data	a available (	on the mixtu	ro itcolf			
· · · · · · · · · · · · · · · · · · ·				ie itsell.			
Specific target organ toxici	ty (single exposur	<u>e)</u>					
Name			Category		Route	of 1	Farget organs

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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### Section 11. Toxicological information

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

Information on the likely routes of exposure	: Not available.
Potential acute health effect	ts
Eye contact	Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the ph	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
Delayed and immediate effe	cts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
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.
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### Section 11. Toxicological information

#### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	4390.23 mg/kg 36.33 mg/l 4.67 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. Avoid contact with skin and clothing.

### Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l	Fish	96 hours
	Chronic NOEC 0.026 mg/l	Fish	30 days
Epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and	Acute LC50 >100 mg/l	Fish	96 hours
1,3-phenylenedimethanamine		Cructocopo Maino magracopo	10 houro
4-nonylphenol, branched	Acute EC50 0.044 mg/l Acute LC50 0.221 mg/l	Crustaceans - <i>Moina macrocopa</i> Fish	48 hours 96 hours

### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700) ethylbenzene 2-methoxy-1-methylethyl acetate	OECD 301F - -	5 % - 28 days 79 % - Readily - 10 days 83 % - Readily - 28 days		-

Conclusion/Summary

: There are no data available on the mixture itself.

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### Section 12. Ecological information

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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>x</b> ylene	-	-	Readily
Epoxy resin (MW ≤ 700)	-	-	Not readily
ethylbenzene	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	7.4 to 18.5	Low
Epoxy resin (MW ≤ 700)	3	31	Low
ethylbenzene	3.6	79.43	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
4-nonylphenol, branched	5.4	251.19	Low

#### Mobility in soil

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

**Other adverse effects** : No known significant effects or critical hazards.

### Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers
	sewers.

### Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	II	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.	(trizinc bis(orthophosphate))	Not applicable.

#### **Additional information**

UN	This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.2.
IMDG	This class 3 viscous liquid that is also environmentally hazardous is not subject to regulation in packagings up to 5 L, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 according to 2.3.2.5.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.
Special precauti	<b>ons for user</b> : <b>Transport within user's premises:</b> 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

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

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### Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 15 March 2024
Date of previous issue	: 2/14/2024
Version	: 1.04
Prepared by	: EHS
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) 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.