SAFETY DATA SHEET



Date of issue/Date of revision3 November 2023Version 1.03

Section 1. Identification		
Product code	: 000001099383	
Product name	: SIGMACOVER 295 BASE REDBROWN	
Other means of identification 00249255	ion	
Product type	: Liquid.	
Relevant identified uses of Product use	 f the substance or mixture and uses advised against 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 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

GHS label elements, including precautionary statements

Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.
Precautionary statements	

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Section 2. Hazards identification

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 vapour. Wash thoroughly after handling.
Response	:	Collect spillage. 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	1	Not applicable.
Disposal	:	Not applicable.
Other hazards which do not result in classification	:	Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
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CAS number/other identifiers

CAS number	: 1	Not applicable.
EC number	: 1	Mixture.

Ingredient name	%	CAS number
zinc oxide	25 - <50	1314-13-2
Epoxy Resin (700 <mw<=1100)< td=""><td>10 - <20</td><td>25036-25-3</td></mw<=1100)<>	10 - <20	25036-25-3
xylene	10 - <20	1330-20-7
1-methoxy-2-propanol	3 - <5	107-98-2
Talc , not containing asbestiform fibres	3 - <5	14807-96-6
ethylbenzene	1 - <3	100-41-4
4-nonylphenol, branched	1 - <3	84852-15-3
toluene	0.1 - <0.3	108-88-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary fir	st aid measures
Eye contact	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the 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 irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
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Section 4. First aid measures

Ingestion

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

most important symptoms/er	C	sta, acute and delayed
Potential acute health effect	<u>s</u>	
Eye contact	:	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	Corrosive to the digestive tract. Causes burns.
Over-exposure signs/sympt	on	<u>15</u>
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	1	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	:	Adverse symptoms may include the following: stomach pains
Indication of immediate medi	<u>ca</u>	l attention and special treatment needed, if necessary
Notes to physician	1	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. 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. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

Section 5. Firefighting measures

Specific hazards arising from the chemical	:	Flammable liquid and vapour. 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 very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides Formaldehyde.
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protecti	ve 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialised 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 spilt 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 material for cont	ainment 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.

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Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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 spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: 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 ingest. Avoid breathing vapour 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 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.
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. Eliminate all ignition sources. Separate from oxidising 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 unlabelled 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
zinc oxide	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 10 mg/m ³ 8 hours. Form Dust PEL (short term): 10 mg/m ³ 15 minutes. Form: Fume PEL (long term): 5 mg/m ³ 8 hours. Form: Fume
xylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
1-methoxy-2-propanol	Workplace Safety and Health Act (Singapore, 2/2006). [Propylene glycol monomethyl ether] PEL (short term): 553 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 369 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m ³ 8 hours.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m ³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
toluene	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 188 mg/m ³ 8 hours. PEL (long term): 50 ppm 8 hours.

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, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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Section 8. Exposure controls/personal protection

Environmental exposure : controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
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/face protection	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	butyl rubber		
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.		
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.		

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state :	Liquid.
Colour :	Brownish-red.
Odour :	Aromatic.
pH :	insoluble in water.
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

-		-	-
Evaporation rate	:	Highest known value: 0 butyl acetate	.84 (ethylbenzene) Weighted average: 0.72compared with
Flammability (solid, gas)	:	liquid	
Vapour pressure	:	Highest known value: 1 average: 0.89 kPa (6.68	.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted 3 mm Hg) (at 20°C)
Vapour density	:	Highest known value: 7 3.94 (Air = 1)	.59 (Air = 1) (4-nonylphenol, branched). Weighted average:
Relative density	1	1.67	
Solubility(ies)		Media	Result
Solubility(les)	1	cold water	Not soluble
Auto-ignition temperature	:	Lowest known value: >2 isoalkanes, cyclics, < 2	230°C (>446°F) (Hydrocarbons, C10-C13, n-alkanes, % aromatics).
Viscosity	:	Kinematic (40°C (104°F	;)): >21 mm²/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: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds Formaldehyde. metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m ³	4 hours	
	LD50 Dermal	Rat	>2000 mg/kg	-	
	LD50 Oral	Rat	>5000 mg/kg	-	
Epoxy Resin (700 <mw <=1100)</mw 	LD50 Dermal	Rat	>2000 mg/kg	-	
)	LD50 Oral	Rat	>2000 mg/kg	-	
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-	
,	LD50 Oral	Rat	4.3 g/kg	-	

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Section 11. Toxicological information

	0			
1-methoxy-2-propanol	LC50 Inhalation Vapour	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
4-nonylphenol, branched	Skin - Erythema/Eschar	Rabbit	4	mg -	-

Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Eyes	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Sensitisation	
Conclusion/Summary	
Skin	: There are no data available on the mixture itself.
Respiratory	: There are no data available on the mixture itself.
Mutagenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Carcinogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Reproductive toxicity	
Conclusion/Summary	: There are no data available on the mixture itself.
Teratogenicity	
Conclusion/Summary	: There are no data available on the mixture itself.
0	delte (electro de como encontro)

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

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

Aspiration hazard

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

Potential acute health effects Causes serious eye irritation. Inhalation No known significant effects or critical hazards. Skin contact Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Ingestion 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 or irritation watering redness Inhalation No specific data. Skin contact Adverse symptoms may include the following: irritation redness dryness cracking Ingestion Adverse symptoms may include the following: irritation redness dryness cracking Adverse symptoms may include the following: irritation irredness dryness cracking Ingestion Adverse symptoms may include the following: stomach pains Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure Potential immediate effects Not available. effects Potential delayed effects Not available. effects Potential immediate iffects	Information on likely routes of exposure	: Not available.
Inhalation : No known significant effects or critical hazards. Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. Ingestion : 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 or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness cracking Ingestion : Adverse symptoms may include the following: irritation redness cracking Ingestion : Adverse symptoms may include the following: stomach pains Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure Potential immediate effects Potential immediate : Not available. Long term exposure Potential immediate Potential immediate : Not available. effects : Not available. effects : Not available. Potential immediate : Not available. effects : Not available. effects : Not available.	Potential acute health effect	<u>s</u>
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Ingestion : 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 or irritation watering redness Inhalation : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness dryness cracking Ingestion : Adverse symptoms may include the following: irritation redness Ingestion : Adverse symptoms may include the following: stomach pains Delayed and immediate effects as well as chronic effects from short and long-term exposure Potential immediate : Not available. effects : Not available. Long term exposure : Not available. Potential immediate : Not available. effects : Not available.	Inhalation	: No known significant effects or critical hazards.
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Potential immediate : Not available. effects Potential delayed effects : Not available.	Potential delayed effects	: Not available.
effects Potential delayed effects : Not available.	Long term exposure	
		: Not available.
Potential chronic health effects	Potential delayed effects	: Not available.
	Potential chronic health effe	ects

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Section 11. Toxicological information

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

Route	ATE value
Oral	60538.05 mg/kg
Dermal	8429.35 mg/kg
Inhalation (vapours)	41.27 mg/l
Inhalation (dusts and mists)	5.3 mg/l

Other information

Causes digestive tract burns. 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 vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

Result	Species	Exposure
Acute EC50 0.17 mg/l	Algae	72 hours
Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
_	Neonate	
Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
Acute LC50 23300 mg/l	Daphnia	48 hours
Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
Acute LC50 0.221 mg/l	Fish	96 hours
	Acute EC50 0.17 mg/l Acute EC50 0.481 mg/l Fresh water Chronic NOEC 0.017 mg/l Fresh water Acute LC50 23300 mg/l Acute LC50 >4500 mg/l Fresh water Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water Acute EC50 0.044 mg/l	Acute EC50 0.17 mg/lAlgaeAcute EC50 0.481 mg/l Fresh waterDaphnia - Daphnia magna - NeonateChronic NOEC 0.017 mg/l Fresh waterAlgaeAcute LC50 23300 mg/lDaphniaAcute LC50 >4500 mg/l Fresh waterDaphniaAcute EC50 1.8 mg/l Fresh waterDaphniaChronic NOEC 1 mg/l Fresh waterDaphniaAcute EC50 0.044 mg/lCrustaceans - Moina macrocopa

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

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-
Conclusion/Summary : There are no data available on the mixture itself.				

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Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily
toluene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
1-methoxy-2-propanol	<1	-	Low
ethylbenzene	3.6	79.43	Low
4-nonylphenol, branched	5.4	251.19	Low
toluene	2.73	8.32	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 minimised 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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
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Section 14. Transport information

Packing group	III	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.	(zinc oxide, 4-nonylphenol, branched)	Not applicable.

Additional 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

Singapore - hazardous chemicals under government control

Ingredient name	Status
nonylphenol and nonylphenol ethoxylates	Listed

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

Date of issue/Date of revision	: 3 November 2023
Date of previous issue	: 3/28/2023
Version	: 1.03
Prepared by	: EHS

Section 16. Other information

Key to abbreviations	: 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)
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) 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.