SAFETY DATA SHEET



Date of issue/Date of revision 21 June 2024 Version 1

Section 1. Identification		
Product code	: 00468193	
Product name	: SIGMAGUARD 750 BINDER GREY	
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	: FLAMMABLE LIQUIDS - Category 2
substance or mixture	ACUTE TOXICITY (inhalation) - Category 4
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	TOXIC TO REPRODUCTION - Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

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GHS label elements, including precautionary statements

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Hazard pictograms

Signal word	: Danger	
Hazard statements	 Highly flammable liquid and vapor. Causes serious eye irritation. Harmful if inhaled. May damage fertility or the unborn child. May cause damage to organs. May cause damage to organs through prolonged or repeated exposure. (hearing organs) 	
Precautionary statements		

Section 2. Hazards identification

Prevention	:	Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor.
Response	:	IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. 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	:	Not applicable.
Disposal	:	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

CAS number/other identi	<u>fiers</u>		
CAS number	: Not applicable.		
EC number	: Mixture.		
Ingredient name		%	CAS number
Silicic acid, ethyl ester		20 - <25	11099-06-2
ethylbenzene		10 - <20	100-41-4
1-methoxy-2-propanol		10 - <20	107-98-2
xylene		5 - <10	1330-20-7
tetraethyl silicate		5 - <10	78-10-4
crystalline silica, respirable powder (<10 microns)		1 - <3	14808-60-7
methanol		1 - <3	67-56-1
trimethyl borate		0.3 - <1	121-43-7

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 necess	ary first 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 recognized 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 this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effe	
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: May cause damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: May cause damage to organs following a single exposure if swallowed.
<u>Over-exposure signs/sym</u>	<u>toms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	lical 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	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If

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 ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly 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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides 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).
Methods and materials for co	ont	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 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

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. 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. 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.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Silicic acid, ethyl ester	Workplace Safety and Health Act
	(Singapore, 2/2006). [Silicon]
	PEL (long term): 10 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.
1	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.
xylene	Workplace Safety and Health Act
5	(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.
tetraethyl silicate	Workplace Safety and Health Act
	(Singapore, 2/2006).
	PEL (long term): 85 mg/m ³ 8 hours.
	PEL (long term): 10 ppm 8 hours.
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 7/2023). [Silica
	crystalline]
	TWA: 0.025 mg/m ³ 8 hours. Form: Respirable
methanol	Workplace Safety and Health Act
	(Singapore, 2/2006).
	PEL (short term): 328 mg/m ³ 15 minutes.
	PEL (short term): 250 ppm 15 minutes.
	PEL (long term): 262 mg/m ³ 8 hours.
	PEL (long term): 200 ppm 8 hours.
trimethyl borate	ACGIH TLV (United States).
	STEL: 6 mg/m ³
	TWA: 2 mg/m ³

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substances will also be required.

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Section 8. Exposure controls/personal protection

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection meas	<u>Ires</u>
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. 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	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: polyvinyl alcohol (PVA), Viton®, butyl rubber May be used: nitrile 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

Odor: Aromatic.pH: Not applicable.Boiling point: >37.78°C (>100°F)Flash point: Closed cup: 21°C (69.8°F)Evaporation rate: Highest known value: 2.1 (methanol) Weighted average: 0.85compar acetateFlammability (solid, gas): liquidVapor pressure: Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). W average: 1.38 kPa (10.35 mm Hg) (at 20°C)	: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)		
Odor : Aromatic. pH : Not applicable. Boiling point : >37.78°C (>100°F) Flash point : Closed cup: 21°C (69.8°F) Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.85compar acetate Flammability (solid, gas) : liquid Vapor pressure : Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). W average: 1.38 kPa (10.35 mm Hg) (at 20°C) Vapor density : Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted av (Air = 1) Relative density : 1.14 Solubility(ies) :	Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).		
Odor : Aromatic. pH : Not applicable. Boiling point : >37.78°C (>100°F) Flash point : Closed cup: 21°C (69.8°F) Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.85comparacetate Flammability (solid, gas) : liquid Vapor pressure : Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). Waverage: 1.38 kPa (10.35 mm Hg) (at 20°C) Vapor density : Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average: (Air = 1) Relative density : 1.14			
Odor: Aromatic.pH: Not applicable.Boiling point: >37.78°C (>100°F)Flash point: Closed cup: 21°C (69.8°F)Evaporation rate: Highest known value: 2.1 (methanol) Weighted average: 0.85compar acetateFlammability (solid, gas): liquidVapor pressure: Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). W average: 1.38 kPa (10.35 mm Hg) (at 20°C)Vapor density: Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted av (Air = 1)			
Odor: Aromatic.pH: Not applicable.Boiling point: >37.78°C (>100°F)Flash point: Closed cup: 21°C (69.8°F)Evaporation rate: Highest known value: 2.1 (methanol) Weighted average: 0.85compar acetateFlammability (solid, gas): liquidVapor pressure: Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). W average: 1.38 kPa (10.35 mm Hg) (at 20°C)Vapor density: Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average	: 1.14		
Odor : Aromatic. pH : Not applicable. Boiling point : >37.78°C (>100°F) Flash point : Closed cup: 21°C (69.8°F) Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.85comparacetate Flammability (solid, gas) : liquid Vapor pressure : Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). Weighted average: 0.85 comparacetate	: Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average: 3.88 (Air = 1)		
Odor : Aromatic. pH : Not applicable. Boiling point : >37.78°C (>100°F) Flash point : Closed cup: 21°C (69.8°F) Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.85comparacetate	: Highest known value: 16.9 kPa (127 mm Hg) (at 20°C) (methanol). Weighted average: 1.38 kPa (10.35 mm Hg) (at 20°C)		
Odor : Aromatic. pH : Not applicable. Boiling point : >37.78°C (>100°F) Flash point : Closed cup: 21°C (69.8°F) Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.85compare	: liquid		
Odor: Aromatic.pH: Not applicable.Boiling point: >37.78°C (>100°F)	: Highest known value: 2.1 (methanol) Weighted average: 0.85compared with butyl acetate		
Odor : Aromatic. pH : Not applicable.			
Odor : Aromatic.			
Color : Grav.	Gray.		
Physical state : Liquid.			

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 metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Silicic acid, ethyl ester	LD50 Oral	Rat	6270 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
1-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	>7000 ppm	6 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	5.2 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 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	-
methanol	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
trimethyl borate	LD50 Dermal	Rabbit	1.98 g/kg	-
•	LD50 Oral	Rat	6.14 g/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 mg	-
Conclusion/Summary					·
Skin :	There are no data available	on the mixture	e itself.		
Eyes :	There are no data available	on the mixture	e itself.		
Respiratory :	There are no data available	on the mixture	e itself.		
Sensitization					
Conclusion/Summary					
Skin :	There are no data available	on the mixture	e itself.		
Respiratory :	There are no data available	on the mixture	e itself.		
Mutagenicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Carcinogenicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Reproductive toxicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Teratogenicity					
Conclusion/Summary :	There are no data available	on the mixtur	e itself.		
Specific target organ toxicit	<u>y (single exposure)</u>				

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
1-methoxy-2-propanol	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
tetraethyl silicate	Category 3	-	Respiratory tract irritation
methanol	Category 1	-	-
trimethyl borate	Category 1	-	optic nerve

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-

Aspiration hazard

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

Information on the likely	: Not available.
routes of exposure	

Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : Harmful if inhaled. Skin contact : May cause damage to organs following a single exposure in contact with skin. Defatting to the skin. May cause skin dryness and irritation. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness : Adverse symptoms may include the following: Inhalation reduced fetal weight increase in fetal deaths skeletal malformations **Skin contact** : Adverse symptoms may include the following: irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations

Section 11 Toxicological information

Ingestion	dverse symptoms may include the following: duced fetal weight crease in fetal deaths celetal malformations	
Delayed and immediate effe	d also chronic effects from short and long term exposure	
Short term exposure		
Potential immediate effects	ot available.	
Potential delayed effects	ot available.	
Long term exposure		
Potential immediate effects	ot available.	
Potential delayed effects	ot available.	
Potential chronic health eff		
General	ay cause damage to organs through prolonged or repeated exposure. repeated contact can defat the skin and lead to irritation, cracking and ermatitis.	
Carcinogenicity	o known significant effects or critical hazards.	
Mutagenicity	o known significant effects or critical hazards.	
Reproductive toxicity	ay damage fertility or the unborn child.	

Numerical measures of toxicity

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Acute toxicity estimates

Route	ATE value
Oral	6814.81 mg/kg
Dermal	5511.42 mg/kg
Inhalation (vapors)	27.18 mg/l
Inhalation (dusts and mists)	4.13 mg/l

Other information

Prolonged or repeated contact may dry skin and cause irritation. Contains . methanol . Cannot be made nonpoisonous. May be fatal or cause blindness if swallowed. 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
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
-	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
methanol	Acute LC50 13 mg/l Fresh water	Fish	96 hours
Conclusion/Summary	: Not available.	·	•

Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10	days	-	-
Conclusion/Summary	: Not available.				·
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
ethylbenzene xylene	-		-		Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	79.43	Low
1-methoxy-2-propanol	<1	-	Low
xylene	3.12	7.4 to 18.5	Low
tetraethyl silicate	3.18	-	Low
methanol	-0.77	-	Low
trimethyl borate	-1.9	-	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

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Section 13. Disposal considerations

emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	•		
	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN: None identified.IMDG: None identified.

IATA : None identified.

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

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	: 21 June 2024
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: EHS
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) 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.