SAFETY DATA SHEET



Date of issue/Date of revision15 November 2022Version 4.03

Section 1. Identification		
Product code	: 00323897	
Product name	: SIGMASHIELD 460 BASE GREY 5177	
Product type	: Liquid.	
Relevant identified uses o	f 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
substance of mixture	
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	SKIN SENSITISATION - Category 1
	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

GHS label elements, including precautionary statements

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Procautionary statements	

Precautionary statements

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Section 2. Hazards identification

Prevention	ar protective gloves. Wear eye or face protection. Keep away from h aces, sparks, open flames and other ignition sources. No smoking. losion-proof electrical, ventilating or lighting equipment. Use non-spa e action to prevent static discharges. Avoid release to the environme athe vapour. Wash thoroughly after handling.	Use arking tools.
Response	ect spillage. Get medical advice/attention if you feel unwell. IF INHA SON CENTER or doctor if you feel unwell. Take off contaminated cl h it before reuse. IF ON SKIN: Wash with plenty of water. If skin irri n occurs: Get medical advice or attention. IF IN EYES: Rinse cautiou er for several minutes. Remove contact lenses, if present and easy to tinue rinsing. Immediately call a POISON CENTER or doctor.	othing and tation or Isly with
Storage	e in a well-ventilated place. Keep cool.	
Disposal	oose of contents and container in accordance with all local, regional, international regulations.	national
Other hazards which do not result in classification	ises digestive tract burns. Prolonged or repeated contact may dry sk se irritation.	in and

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
epoxy resin (MW ≤ 700)	20 - <25	25068-38-6
xylene	5 - <10	1330-20-7
Talc , not containing asbestiform fibres	3 - <5	14807-96-6
crystalline silica, respirable powder (<10 microns)	3 - <5	14808-60-7
4-nonylphenol, branched	1 - <3	84852-15-3
ethylbenzene	1 - <3	100-41-4
2-methylpropan-1-ol	1 - <3	78-83-1

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

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

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

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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.
Eye contact	t	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Section 4. First aid measures

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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.
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/e	ffec	ts, acute and delayed
Potential acute health effect	:ts	
Eye contact	:	Causes serious eye damage.
Inhalation	:	Harmful if inhaled.
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/symp	ton	<u>15</u>
Eye contact	:	Adverse symptoms may include the following: pain watering redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	:	Adverse symptoms may include the following: stomach pains
Indication of immediate med	lica	l 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 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. 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.

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Section 5. Firefighting measures

 Specific hazards arising from the chemical Flammable liquid and vapour. Runoff to sewer may cred In a fire or if heated, a pressure increase will occur and the risk of a subsequent explosion. This material is very long lasting effects. Fire water contaminated with this is and prevented from being discharged to any waterway, Hazardous thermal decomposition products Decomposition products may include the following material oxide/oxides Decomposition spectrate actions for fire-fighters Promptly isolate the scene by removing all persons from there is a fire. No action shall be taken involving any provide suitable training. Move containers from fire area if this Use water spray to keep fire-exposed containers cool. Fire-fighters should wear appropriate protective equipment for fire-fighters 	
decomposition productscarbon oxides halogenated compounds metal oxide/oxidesSpecial protective actions for fire-fighters: Promptly isolate the scene by removing all persons from there is a fire. No action shall be taken involving any p suitable training. Move containers from fire area if this Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipm	d the container may burst, with ery toxic to aquatic life with material must be contained
for fire-fightersthere is a fire. No action shall be taken involving any p suitable training. Move containers from fire area if this Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipm	terials:
	personal risk or without s can be done without risk.
mode.	

Section 6. Accidental release measures

Personal precautions, protect	ive 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. Do not breathe 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 con	tainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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
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Section 6. Accidental release measures

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 breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
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 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		
X lene	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.		
Talc , not containing asbestiform fibres	Workplace Safety and Health Act		
	(Singapore, 2/2006).		
	PEL (long term): 2 mg/m ³ 8 hours.		
crystalline silica, respirable powder (<10 microns)	ACGIH TLV (United States, 1/2021). [Silica,		

Section 8. Exposure controls/personal protection

ethylbenzene	crystalline] TWA: 0.025 mg/m ³ 8 hours. Form: Respirable 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.			
2-methylpropan-1-ol	PEL (long term): 100 ppm 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 152 mg/m ³ 8 hours. PEL (long term): 50 ppm 8 hours.			
Recommended monitoring : procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
Appropriate engineering : controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour 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 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.			
	Chemical splash goggles and face shield.			
Skin protection				
Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.			
Gloves :	butyl rubber			

Section 8. Exposure controls/personal 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.
 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.
: 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	:	Various				
Odour	:	Aromatic.				
рН	:	insoluble in water.				
Boiling point	:	>37.78°C (>100°F)				
Flash point	:	Closed cup: 31.9°C (89.4°	F)			
Evaporation rate	;	Highest known value: 0.84 butyl acetate	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.76compared with			
Flammability (solid, gas)	:	liquid				
Vapour pressure	:		Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Weighted average: 1.01 kPa (7.58 mm Hg) (at 20°C)			
Vapour density	;	Highest known value: 7.59 4.35 (Air = 1)	Highest known value: 7.59 (Air = 1) (4-nonylphenol, branched). Weighted average: 4.35 (Air = 1)			
Relative density	:	1.66				
Colubility(icc)		Media	Result			
Solubility(ies)		cold water	Not soluble			
Auto-ignition temperature	:	415°C				
Viscosity	:	Kinematic (40°C (104°F)):	>21 mm²/s (>21 cSt)			
Viscosity	:	60 - 100 s (ISO 6mm)				

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
,	LD50 Oral	Rat	4.3 g/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/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	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-

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

Irritation/Corrosion

Product/ingredient nam	e	Result	Species	Score	Exposure	Observation	
epoxy resin (MW ≤ 700)		Eyes - Mild irritant	Rabbit	-	-	-	
		Skin - Mild irritant	Rabbit	-	-	-	
xylene		Skin - Moderate irritant	Rabbit	-	24 hours 500	-	
					mg		
4-nonylphenol, branched		Skin - Erythema/Eschar	Rabbit	4	-	-	
Conclusion/Summary							
Skin	: 1	There are no data available	on the mixtur	e itself.			
Eyes	: 1	There are no data available on the mixture itself.					
Respiratory	: 1	There are no data available on the mixture itself.					
Sensitisation							

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Section 11. Toxicological information

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Product/ingredient nam	ie	Route of exposure	Species	Result	
epoxy resin (MW \leq 700)		skin	Mouse	Sensitising	
Conclusion/Summary Skin Respiratory <u>Mutagenicity</u>			available on the mixture itse available on the mixture itse		
Conclusion/Summary Carcinogenicity	:	There are no data	available on the mixture its	elf.	
Conclusion/Summary Reproductive toxicity	:	There are no data	available on the mixture its	elf.	
Conclusion/Summary <u>Teratogenicity</u>	:	There are no data	available on the mixture its	elf.	
Conclusion/Summary			available on the mixture its	elf.	

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
	Category 1	inhalation	-
	Category 2	-	hearing organs

Aspiration hazard

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

Information on likely routes of exposure	Not available.
Potential acute health effect	<u>ts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

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Section 11. Toxicological information

Ingestion

: Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Inhalation	 Adverse symptoms may include the following: pain watering redness No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	fects
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when

	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	27391.72 mg/kg	
Dermal	8068.32 mg/kg	
Inhalation (vapours)	16.09 mg/l	
Inhalation (dusts and mists)	2.07 mg/l	

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Section 11. Toxicological information

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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. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
4-nonylphenol, branched	Acute EC50 0.044 mg/l	Crustaceans - Moina macrocopa	48 hours
	Acute LC50 0.221 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
poxy resin (MW ≤ 700) ethylbenzene	OECD 301F -	5 % - 28 days 79 % - Readily - 10 d	- days -	-
Conclusion/Summary	: There are no data available on the mixture itself.			

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy resin (MW ≤ 700)	-	-	Not readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
poxy resin (MW ≤ 700)	3	31	low
xylene	3.12	7.4 to 18.5	low
4-nonylphenol, branched	5.4	251.19	low
ethylbenzene	3.6	79.43	low
2-methylpropan-1-ol	1	-	low

Mobility in soil

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

Section 12. Ecological information

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
	dispersal of spilt 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	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.	(Epoxy resin (MW ≤ 700), 4-nonylphenol, branched)	Not applicable.

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
IATA	: The environmentally hazardous substance mark may appear if required by other transportation regulations.
Special prec	cautions for user : Transport within user's premises: always transport in closed containers that a

lions for user	1.5	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.

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Section 14. Transport information

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.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 15 November 2022
Date of previous issue	: 6/25/2021
Version	: 4.03
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.