SAFETY DATA SHEET



Date of issue/Date of revision12 November 2024Version 1.04

Section 1. Identification			
Product code	: 000001020162		
Product name	: SIGMAZINC 102 HS /109 HS HARDENER		
Other means of identification	on de la constante de la const		
00218768; 00438803; 004806	339		
Product type	: Liquid.		
Relevant identified uses of the substance or mixture and uses advised against			
Product use	 Hardener. 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 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 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	:	Flammable liquid and vapor. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	-	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. Avoid release to the environment. Avoid breathing vapor.
Response	:	Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Store in a well-ventilated place. Keep container tightly closed.
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.

Section 3. Composition/information on ingredients

Substance/mixture :

CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	25 - <50	68082-29-1
Amides, from C18-unsatd. fatty acid dimers, tall-oil fatty acids and triethylenetetramine, reaction products with bisphenol A-epichlorohydrin	20 - <25	68953-09-3
polymer		/
xylene	10 - <20	1330-20-7
2-methylpropan-1-ol	10 - <20	78-83-1
benzyl alcohol	10 - <20	100-51-6
2,4,6-tris(dimethylaminomethyl)phenol	5 - <10	90-72-2
ethylbenzene	1 - <3	100-41-4
3,6-diazaoctanethylenediamin	1 - <3	112-24-3

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.

Singapore English (US) Page: 2/*	Singapore	English (US)	Page: 2/14
----------------------------------	-----------	--------------	------------

Section 3. Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures		
Eye contact	 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. 	
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.	
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

uses serious eye	damage.
rmful if inhaled. N	lay cause respiratory irritation.
uses severe burn	s. Defatting to the skin. May cause an allergic skin reaction.
rrosive to the dige	stive tract. Causes burns.
in tering	nay include the following:
piratory tract irrita	nay include the following: tion
in or irritation Iness mess acking	nay include the following:
	nay include the following:
ention and spec	al treatment needed, if necessary
	of decomposition products in a fire, symptoms may be delayed. may need to be kept under medical surveillance for 48 hours.
specific treatmen	t.
: Ca : Ha : Ca : Co toms : Ad pai va rec : Ad res col : Ad pai rec dry cra blis : Ad pai rec dry cra blis : Ad	 Causes severe burns Corrosive to the dige Adverse symptoms n pain watering redness Adverse symptoms n respiratory tract irritat coughing Adverse symptoms n pain or irritation redness dryness cracking blistering may occur Adverse symptoms n stomach pains

Singapore	English (US)	Page: 3/14
-----------	--------------	------------

Section 4. First aid measures

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.	Protection of first-aiders	providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing
--	----------------------------	--

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	: 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 nitrogen oxides halogenated compounds
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. Do not breathe 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".

Product name SIGMAZINC 102 HS /109 HS HARDENER

Section 6. Accidental release measures

Environmental precautions	1	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 f	for containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

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 vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
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.

Section 7. Handling and storage

Conditions for safe storage,	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in
including any	accordance with local regulations. Store in a segregated and approved area. Store
incompatibilities	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

Ingredient name		Exposure limits
xylene 2-methylpropan-1-ol ethylbenzene		Workplace Safety and Health Act (Singapore, 2/2006) [Xylene] PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m ³ . PEL (short term) 15 minutes: 651 mg/m ³ . PEL (short term) 15 minutes: 150 ppm. Workplace Safety and Health Act (Singapore, 2/2006) PEL (long term) 8 hours: 50 ppm. PEL (long term) 8 hours: 152 mg/m ³ . Workplace Safety and Health Act
		(Singapore, 2/2006) PEL (long term) 8 hours: 100 ppm. PEL (long term) 8 hours: 434 mg/m ³ . PEL (short term) 15 minutes: 543 mg/m ³ . PEL (short term) 15 minutes: 125 ppm.
Recommended monitoring procedures		priate monitoring standards. Reference to tho the third the the termination of hazardous
Appropriate engineering controls	contaminants below any recommend	ols to keep worker exposure to airborne led or statutory limits. The engineering controls concentrations below any lower explosive
invironmental exposure controls	they comply with the requirements of	rocess equipment should be checked to ensure f environmental protection legislation. In some ineering modifications to the process ce emissions to acceptable levels.

Individual protection measures

Singapore	English (US)	Page: 6/14
-----------	--------------	------------

Product name SIGMAZINC 102 HS /109 HS HARDENER

Section 8. Exposure controls/personal protection

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 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	: nitrile neoprene
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.
Color	: Colorless.
Odor	: Amine-like.
рН	insoluble in water.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 31°C (87.8°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: liquid
Vapor pressure	: Not available.
Vapor density	:
Relative density	: 0.95

ingapore English (US)	Singapore	English (US)	
-----------------------	-----------	--------------	--

Section 9. Physical and chemical properties

Solubility(ies)	Media	Result	
	. cold water	Not soluble	
Auto-ignition temperature	: 335°C		
Viscosity	Kinematic (room	emperature): Not available. temperature): Not available. (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 ingredient	S.
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 nitrogen oxides halogenated compounds	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
in any for to concern and the	LD50 Oral	Rat	>2000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
5	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
-	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
2,4,6-tris	LD50 Dermal	Rat	1280 mg/kg	-
(dimethylaminomethyl) phenol				
•	LD50 Oral	Rat	1200 mg/kg	-

Product name SIGMAZINC 102 HS /109 HS HARDENER

Section 11. Toxicological information

	U			
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	-
3,6-diazaoctanethyle	enediamin LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
xylene	Skin - Irritant Skin - Moderate irritant	Human Rabbit	-	- 24 hours 500 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 itse
--

Sensitization

• • • • • • • • • • • • • • • • • • •	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 3,6-diazaoctanethylenediamin	skin	Mouse Guinea pig	Sensitizing Sensitizing

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.
Specific target organ to	<u>xicity (single exposure)</u>

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Amides, from C18-unsatd. fatty acid dimers, tall-oil fatty acids and triethylenetetramine, reaction products with bisphenol A-epichlorohydrin polymer	Category 3	-	Respiratory tract irritation
xylene	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
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

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

Information on the likely routes of exposure	: Not available.
Potential acute health effect	t <u>s</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns.
	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
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

Section 11. Toxicological information

Delayed and immediate effe	ects 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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value	
Oral	4704.56 mg/kg	
Dermal	5672.1 mg/kg	
Inhalation (vapors)	30.7 mg/l	
Inhalation (dusts and mists)	3.94 mg/l	

Other information

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. 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. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/I Fresh water Chronic NOEC 1 mg/I Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -

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

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2,4,6-tris (dimethylaminomethyl)phenol		4 % - Not readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
xylene benzyl alcohol 2,4,6-tris (dimethylaminomethyl)phenol	- - -	- - -	Readily Readily Not readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
benzyl alcohol	0.87	-	Low
2,4,6-tris	0.219	-	Low
(dimethylaminomethyl)phenol			
ethylbenzene	3.6	79.43	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

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

Section 13. Disposal considerations

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

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III		III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide)	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.

Singapore	English (US)	Page: 13/14
-----------	--------------	-------------

Section 14. Transport information

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.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 12 November 2024
Date of previous issue	: 10/9/2024
Version	: 1.04
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.

	Singapore English (US)	Page: 14/14
--	------------------------	-------------