# **SAFETY DATA SHEET**



Date of issue/Date of revision16 December 2023Version 2.02

Section 1. Identification		
Product code	: 00289905	
Product name	: AMERLOCK 2/400 RESIN	
Product type	: Liquid.	
Relevant identified uses of the substance or mixture and uses advised against		
Product use	Coating. Professional applications, Used by spraying.	
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737	
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)	

# Section 2. Hazards identification

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

GHS label elements, including precautionary statements

Hazard pictograms		
Signal word	: Warning	
Hazard statements	<ul> <li>Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.</li> </ul>	
Precautionary statements		

# 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. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	1	Store in a well-ventilated place. Keep container tightly closed.
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 identifiers**

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
bis-[4-(2,3-epoxipropoxi)phenyl]propane	50 - 100	1675-54-3
Talc , not containing asbestiform fibres	10 - <20	14807-96-6
Solvent naphtha (petroleum), light aromatic	1 - <3	64742-95-6
xylene	1 - <3	1330-20-7
1,2,4-trimethylbenzene	1 - <3	95-63-6

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	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>
Inhalation	: 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	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show the container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

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### Section 4. First aid measures

Most important symptoms/e	ffe	cts, acute and delayed
Potential acute health effect	:ts	
Eye contact	:	Causes serious eye irritation.
Inhalation	:	May cause respiratory irritation.
Skin contact	:	Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symp	tor	<u>ns</u>
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	:	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	1	No specific data.
Indication of immediate medical 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	1	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 5. Firefighting measures

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

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### Section 5. Firefighting measures

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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 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 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 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 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 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 noncombustible, 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 6. Accidental release measures

# Section 7. Handling and storage

Precautions for safe handling	L	
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. 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
<b>F</b> alc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m <sup>3</sup> 8 hours.
xylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene]
	PEL (short term): 651 mg/m <sup>3</sup> 15 minutes. PEL (short term): 150 ppm 15 minutes.
	PEL (long term): 434 mg/m <sup>3</sup> 8 hours. PEL (long term): 100 ppm 8 hours.
1,2,4-trimethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). [Trimethyl benzene]

# Section 8. Exposure controls/personal protection

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				PEL (long term): 123 mg/m³ 8 hours. PEL (long term): 25 ppm 8 hours.
	Recommended monitoring procedures	:		iate monitoring standards. Reference to nods for the determination of hazardous
	Appropriate engineering controls	:	contaminants below any recommende	Is to keep worker exposure to airborne ed or statutory limits. The engineering controls concentrations below any lower explosive
	nvironmental exposure ontrols	:		
h	ndividual protection measur	es		
	Hygiene measures	:	eating, smoking and using the lavatory Appropriate techniques should be use Contaminated work clothing should no	d to remove potentially contaminated clothing. of be allowed out of the workplace. Wash Ensure that eyewash stations and safety
	Eye/face protection	:	Chemical splash goggles.	
	Skin protection			
	Hand protection	:	be worn at all times when handling che this is necessary. Considering the par check during use that the gloves are s should be noted that the time to break	rers. In the case of mixtures, consisting of
	Gloves	1	butyl rubber	
	Body protection	:	being performed and the risks involve	
	Other skin protection	:	Appropriate footwear and any addition selected based on the task being perfe approved by a specialist before handli	ormed and the risks involved and should be
	Respiratory protection	:	hazards of the product and the safe w workers are exposed to concentration appropriate, certified respirators. Use	n known or anticipated exposure levels, the orking limits of the selected respirator. If s above the exposure limit, they must use a properly fitted, air-purifying or air-fed I standard if a risk assessment indicates this is

# Section 9. Physical and chemical properties

#### **Appearance**

Physical state	:	Liquid.	
Colour	:	Various	
Odour	:	Characteristic.	
рН	:	insoluble in water.	
Boiling point	:	>37.78°C (>100°F)	
Flash point	:	Closed cup: 28°C (82.4°F)	
Evaporation rate	:	0.77 (xylene) compared with a	outyl acetate
Flammability (solid, gas)	:	liquid	
Vapour pressure	:	✔ighest known value: 0.9 kPa 0.04 kPa (0.3 mm Hg) (at 20°	i (6.7 mm Hg) (at 20°C) (xylene).  Weighted average: C)
Vapour density	:	✔ighest known value: 15.4 (Air = 1) (1,2-Benzenedicarboxylic acid, di- C9-11-branched alkyl esters, C10-rich). Weighted average: 11.6 (Air = 1)	
Relative density	:	1.42	
	_	Media Re	esult
Solubility(ies)		cold water No	ot soluble
Auto-ignition temperature	:	Lowest known value: 280 to 4 light aromatic).	70°C (536 to 878°F) (Solvent naphtha (petroleum),
Viscosity	:	Kinematic (40°C (104°F)): >2	1 mm²/s (>21 cSt)

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredie	ents.
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 metal oxide/oxides	

# Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
5	LD50 Oral	Rat	8400 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapour	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-

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

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
s-[4-(2,3-epoxipropoxi)	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Oedema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
-				mg	

#### **Conclusion/Summary**

: 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**

Skin

Product/ingredient name	Route of exposure	Species	Result	
pís-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitising	
Conclusion/Summary				
Skin	There are no da	ita available on the mixtu	ure itself.	
Respiratory	There are no da	ta available on the mixtu	ure itself.	
Mutagenicity				
Conclusion/Summary Carcinogenicity	: There are no da	ata available on the mixt	ure itself.	

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

Product name AMERLOCK 2/400 RESIN

# Section 11. Toxicological information

#### **Teratogenicity**

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

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

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

#### Information on likely routes : Not available. of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	No specific data.

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

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## Section 11. Toxicological information

<u>Short term exposure</u>	
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	ects
General	<ul> <li>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.</li> </ul>
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
Dermal	78003.6 mg/kg
Inhalation (vapours)	98.09 mg/l
Inhalation (dusts and mists)	11.43 mg/l

#### Other information

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 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

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Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours

#### Persistence/degradability

**Conclusion/Summary** 

: There are no data available on the mixture itself.

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# Section 12. Ecological information

<u> </u>				
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
Inservice of the service of the se	-	-	Not readily	
xylene	-	-	Readily	

#### **Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
✓ylene	3.12	7.4 to 18.5	Low
1,2,4-trimethylbenzene	3.63	120.23	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 proper PAINT PAINT PAINT PAIN shipping name	PAINT PAINT	UN	
shipping nameTransport hazard33		UN1263	UN number
	3 3	PAINT	
		3	-
Packing group III III III		III	Packing group

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#### Product code 00289905 Product name AMERLOCK 2/400 RESIN

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### Section 14. Transport information

Environmental	Yes. The environmentally	Yes.	Yes. The environmentally
hazards	hazardous substance mark is not required.		hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	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

None.

#### International regulations

Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Section 16. Other information

**History** Date of issue/Date of : 16 December 2023 revision Date of previous issue : 11/1/2022 Version 2.02 **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 = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient

### Section 16. Other information

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.