# **SAFETY DATA SHEET**



Date of issue/Date of revision7 November 2021Version 4.01

Section 1. Identification		
Product code	: 00333518	
Product name	: AMERLOCK SEALER CLEAR BAS	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
Product use	Coating. Industrial 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	:	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
		SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2

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Hazard pictograms	
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Signal word	:	Warning
Hazard statements	-	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

## Section 2. Hazards identification

: Collect spillage. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
: Not applicable.
: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : Mone known. result in classification

### Section 3. Composition/information on ingredients

: 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
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	10 - <20	17557-23-2

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

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	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

Potential acute	health effects
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.

### Singapore English (US)

# Product name AMERLOCK SEALER CLEAR BAS Section 4. First aid measures

Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/sym	<u>otoms</u>	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: No specific data.	
Skin contact	: Adverse symptoms may include the following: irritation redness	
Ingestion	: No specific data.	
Indication of immediate me	dical attention and special treatment needed, if necessary	
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>	
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. 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
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.
Special protective equipment for fire-fighters	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

## 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. 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".
	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 for con	tainment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. 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. 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 ingest. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.

# Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities	: Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. 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. 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.
	materials before manuling of use.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

None.

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	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.	
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 measure	<u>es</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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.	
Eye/face protection	:	Chemical splash goggles.	
Skin protection			
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.	
Gloves	:	butyl rubber	

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# Section 8. Exposure controls/personal protection

Body protection	<ul> <li>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.</li> </ul>
Other skin protection	<ul> <li>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.</li> </ul>
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	: Clear.
Odor	: Characteristic.
рН	insoluble in water.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 100°C (212°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: liquid
Vapor pressure	: Ħighest known value: 0.009 kPa (0.07 mm Hg) (at 20°C) (1,3-bis(2,3-epoxypropoxy) -2,2-dimethylpropane). Weighted average: 0.002 kPa (0.02 mm Hg) (at 20°C)
Vapor density	: Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane). Weighted average: 10.98 (Air = 1)
Relative density	: 1.14
Solubility	: Insoluble in the following materials: cold water.
Auto-ignition temperature	: Not available.
Viscosity	: <b>K</b> inematic (40°C (104°F)): >21 mm²/s (>21 cSt)

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.

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### Section 10. Stability and reactivity

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

# Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
1,3-bis(2,3-epoxypropoxy) -2,2-dimethylpropane	LD50 Oral LD50 Oral	Rat Rat	15000 mg/kg 4500 mg/kg	-

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

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-

**Conclusion/Summary** 

Skin	: There are no data available on the mixture itself.
Eyes	: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

### **Sensitization**

Product/ingredient name	Route of exposure	Species	Result
bis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing
Conclusion/Summary			
Skin :	There are no da	ita available on the mixtu	re itself.
Respiratory :	There are no da	ta available on the mixtu	re itself.
Mutagenicity			
Conclusion/Summary	There are no da	ata available on the mixtu	ıre itself.
<b>Carcinogenicity</b>			
Conclusion/Summary	There are no da	ata available on the mixtu	ıre itself.
Reproductive toxicity			
Conclusion/Summary	There are no da	ata available on the mixtu	ıre itself.

# Section 11. Toxicological information

Tetragenicity Conclusion/Summary : There are no data available on the mixture itself. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on the likely : Not available. routes of exposure Potential acute health offects Eye contact : Causes serious eye irritation. Instation : No known significant effects or critical hazards. Skin contact : Causes skin irritation. May cause an allergic skin reaction. Ingestion : No known significant effects or critical hazards. Symptoms rolated to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following:     pain or irritation     watering     redness Indestin Causes Ingestion : No specific data. Delayed and immediate offects and also chronic effects from short and long term exposure Potential immediate i Not available. effects Potential delayed effects : Not available. effects Potential fittered : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Carcinogenicity : No known significant effects or critical hazards. Singapore English (US) Poters		
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Potential immediate       : Not available.         effects       : Not available.         Potential delayed effects       : Not available.         Long term exposure       : Not available.         Potential immediate       : Not available.         effects       : Not available.         Potential delayed effects       : Not available.         effects       : Ot available.         Potential delayed effects       : Not available.         Potential chronic health effects       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.	Delayed and immediate effe	cts and also chronic effects from short and long term exposure
effects         Potential delayed effects       : Not available.         Long term exposure         Potential immediate       : Not available.         effects         Potential delayed effects       : Not available.         Potential delayed effects       : Not available.         Potential chronic health effects       : Not available.         General       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.	Short term exposure	
Long term exposure         Potential immediate       : Not available.         effects         Potential delayed effects       : Not available.         Potential chronic health effects         General       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.		: Not available.
Potential immediate effects       : Not available.         effects       Potential delayed effects       : Not available.         Potential chronic health effects       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.	Potential delayed effects	: Not available.
effects         Potential delayed effects       : Not available.         Potential chronic health effects         General       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.		
Potential chronic health effects         General       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.		: Not available.
General       : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.         Carcinogenicity       : No known significant effects or critical hazards.	Potential delayed effects	: Not available.
Carcinogenicity       : No known significant effects or critical hazards.	Potential chronic health eff	ects
	General	
Singapore English (US) Page: 8/11	Carcinogenicity	: No known significant effects or critical hazards.
	Singapore English (US)	 Page: 8/1

## Section 11. Toxicological information

**Mutagenicity** 

: No known significant effects or critical hazards.

**Reproductive toxicity** 

: No known significant effects or critical hazards.

### Numerical measures of toxicity

### Acute toxicity estimates

Not available.

### Other information

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.

# Section 12. Ecological information

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### **Toxicity**

Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - daphnia magna	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Conclusion/Summary	: There are no data available on the	e mixture itself.	

### Persistence/degradability

Conclusion/Summary

: There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis-[4-(2,3-epoxipropoxi)	-	-	Not readily
phenyl]propane			

#### **Bioaccumulative potential**

Not available.

<u>Mobility in soil</u>

: Not available.

Other adverse effects

Soil/water partition

coefficient (Koc)

: No known significant effects or critical hazards.

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### 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 nonrecyclable 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(bis-[4-(2,3-epoxipropoxi) phenyl]propane)	Not applicable.

#### **Additional information**

UN	:	This product is not regulated as a dangerous good when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
IMDG	1	This product is not regulated as a dangerous good when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
ΙΑΤΑ	:	This product is not regulated as a dangerous good when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
Special precaution	ons	<b>for user</b> : <b>Transport within user's premises:</b> 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 to IMO instrumer		

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# 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.

History

### Section 16. Other information

History	
Date of issue/Date of revision	: 7 November 2021
Date of previous issue	: 5/18/2020
Version	: 4.01
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.