



MATERIAL SAFETY DATA SHEET

Issue date: 19th March, 2008

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: EPOXY REPAIR BINDER PART A

Company: Tremco Pty Limited ABN 25 000 024 064
Address: Unit 1, 2 Park Road, Rydalmere, New South Wales, 2116
Contact Nos.: Telephone: (02) 9638 2755 Fax: (02) 9638 2955
Emergency
Telephone: 1800 224 512 Business Hours only 7am to 5pm Monday to Friday
Inclusive
Product Codes: 225311 20 Litre
Recommended
Use: Two Part Liquid Epoxy Resin for use in civil engineering. Use in
conjunction with Epoxy Repair Binder Part B
Proper Shipping
Name: None allocated

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE AUSTRALIA. NOT CLASSIFIED AS DANGEROUS.

Symbol: Xi Irritant
Risk Phrases: R36/38 Irritating to skin and eyes
R43 May cause sensitisation by skin contact

Poison Schedule: S5 This product is a Schedule Poison S5 and must be stored, maintained and used in accordance with the relevant regulation

Safety Phrases: S2 Keep out of reach of children

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS Number:	Proportion:
Bisphenol A Epoxy Resin	25068-38-6	Very High >60%
Aliphatic Glycidyl Ether	68609-97-2	Low 1-9%

All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS) and the National Registration Authority (NRA) approved active constituents.

4. FIRST AID MEASURES

Poisons Schedule Number: S5

Poisons Information Centre in each State capital can provide additional assistance for scheduled poisons. Ph. 13 11 26.

Ingestion: If swallowed do not induce vomiting. Rinse mouth with water, give glass of water and seek medical attention.

- Eye: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.
- Skin: Remove contaminated clothing and footwear. Wash skin thoroughly with water. If swelling, redness, blistering or irritation occurs seek medical attention.
- Inhalation: Remove victim from exposure to fresh air. If breathing becomes difficult give artificial respiration and seek medical attention.

Note to Physician: Treat the patient symptomatically.

5. FIRE FIGHTING MEASURES

- Flash point : >200°C (ASTM D 93)
- Decomposition Temperature : >200°C
- Extinguishing Media : Water, foam, dry chemical powder or Carbon Dioxide.
- Specific Hazards : The material is stable under normal conditions. Hazardous polymerisation can occur on heating. On decomposition gives off Carbon Monoxide and other gases. Incompatible with alkalis, acids and strong oxidisers.
- Fire Fighters : Wear positive pressure, self-contained breathing apparatus and full protective clothing.
- Additional Information: Hazchem code – None Allocated

6. ACCIDENTAL RELEASE MEASURES

- Small Spills: Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes.
- Large Spills: Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local statutory codes. If contamination of crops, waterways, drains or sewerage has occurred, advise Emergency Services or State Department of Agriculture

7. HANDLING & STORAGE

- Storage: Store in the closed, original container in a cool ventilated area. Keep containers tightly closed when not in use. Keep away from explosives, food, oxidising agents and organic peroxides. This

product is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value assigned for this specific product by the National Occupational and Safety Commission (Worksafe Australia). However, supplier recommended Hygiene Standard as under :

Material	TWA		STEL		Notices
	ppm	mg/m ³	ppm	mg/m ³	
Bisphenil A resin	N/e*	N/E*	N/E*	N/E*	-
Ether	N/E*	N/E*	N/E*	N/E*	-

N/E* = No Exposure Standard has been established for this product.

Engineering Controls: Special ventilation is not normally required due to the low volatility of the product at normal temperature. However, in the operation of certain equipment or at elevated temperatures, mists or vapours may be generated and exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standards or where no exposure standard is allocated, as low as reasonably practicable.

Personal Protection: Use overalls, safety shoes, safety goggles, rubber or chemical resistance gloves and respirator if required.

Manufacturing,
 Packaging &
 Transport:

Avoid skin and eye contact and the inhalation of vapour. Wear overalls, safety goggles and impervious gloves. Available information suggests that the gloves made from PVC should be suitable for intermittent contact, however, due to variations in glove construction and local conditions, the final assessment should be made by the user. If inhalation risk exists, wear organic vapour respirator meeting requirements of AS/NZ 1715 and 1716. Always wash hands with soap and water before smoking, eating, drinking or using toilet facilities.

Preparations &
 Use of Product:

Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale mist or vapours. After each day's use wash gloves, safety goggles and all the contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear or pigmented liquid
Solubility:	Insoluble in water
Specific Gravity:	1.12 - 1.16 @ 25°C
Boiling Point:	>200 °C
Relative Vapour Density:	8 (air=1)
Melting Range:	Not established
Vapour Pressure:	<0.01Pa (20 °C)
Decomposition Temperature:	>200 °C
Flash Point:	>200 °C (ASTM D 93)
Flammability Limits:	Not established
Ph:	Not established
Autoignition Temperature:	Not available
% Volatile by Volume:	Nil

(All above values are Typical Values only)

10. STABILITY AND REACTIVITY

The product is stable under normal conditions and use.

11. TOXOCOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this Material safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Acute Effects

Ingestion:	Harmful if swallowed. May cause gastrointestinal discomfort and irritation.
Eye:	Brief contact may cause mild irritation to eyes.
Skin:	Mild irritant and poorly absorbed through the skin. Prolonged and repeated contact may cause severe irritation and/or dermatitis.
Inhaled:	Not hazardous at ambient temperatures. Vapours generated at elevated temperatures or when inhaled repeatedly may cause irritation to nose, throat and respiratory tract.

Long Term Effects: Repeated skin contact and inhalation may result in sensitisation in some individuals. May cause allergic reaction, dermatitis or asthma like symptoms. Follow good work practices. Avoid ingestion, inhalation, eye and skin contact. Wash hands with soap and water before eating, drinking, smoking or using toilet facilities.

**Acute & Chronic
Toxicity:**

Negative in a battery of mutagenicity assays.
No evidence of carcinogenicity was observed in long term studies of rats.
No development nor reproductive effects in rat and rabbit.
Acceptable Daily Intake (ADI) for humans is 0.01mg/kg/day

12. ECOLOGICAL INFORMATION

Avoid contamination of drains, sewerage, creeks and waterways.
Not toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Dispose of all empty containers as per State & Council Regulations. Do not dispose near waterways, vegetation and tree roots. Empty containers and product should not be burned.

14. TRANSPORT INFORMATION

UN Number: Not applicable
Shipping Name: Not applicable
Class: Not classified as dangerous goods
Subsidiary Risk: Nil
Packaging Group: Not applicable
Hazchem Code: Not applicable
EPG: Not applicable
Segregation: Not to be loaded with explosives, oxidising agents or organic peroxides

For road, marine and air transport this product is not classified as dangerous goods within the context of National & International Transport Regulations.

15. REGULATORY INFORMATION

Risk & Safety Phrases listed in Section 2
Classified as Hazardous according to the criteria of Worksafe Australia
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods By Road and Rail.
Classified as a Scheduled Poison S5 according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)
The National Standard for the Storage and Handling of Workplace Dangerous Goods {NOHSC : 1015 (2001)}

16. OTHER INFORMATION

Keep out of reach of children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use and storage of the product under every foreseeable condition.

Website: www.tremco.com.au

The information sourced for the preparation of this document was correct and complete at the time of writing or to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority.



MATERIAL SAFETY DATA SHEET

Issue date: 19th March, 2008

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: EPOXY REPAIR BINDER PART B

Company: Tremco Pty Limited ABN 25 000 024 064
Address: Unit 1, 2 Park Road, Rydalmere, New South Wales, 2116
Contact Nos.: Telephone: (02) 9638 2755 Fax: (02) 9638 2955
Emergency
Telephone: 1800 224 512 Business Hours only 7am to 5pm Monday to Friday
Inclusive
Product Codes: 225310 4 litre
Recommended
Use: Two Part Liquid Epoxy for civil engineering use. Use in
conjunction with Epoxy Repair Binder Part A
Proper Shipping
Name: Isophorondiamine

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE AUSTRALIA.

Symbol: Xn Harmful
Risk Phrases: R20/21/22 Harmful by inhalation, in contact with skin and if
swallowed.
R34 Causes burns
R43 May cause sensitisation by skin contact
R52/53 Harmful to aquatic organisms. May cause long term
adverse effects in the aquatic environment
D.G. CLASS: 8
Subsidiary Risk: N/A
Poison Schedule: S5 This product is a Schedule Poison S5 and must be stored,
maintained and used in accordance with the relevant
regulation
Safety Phrases: S2 Keep out of reach of children

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS Number:	Proportion:
Bisphenol A Epoxy Resin	25068-38-6	Very High >60%
Aliphatic Glycidyl Ether	68609-97-2	Low 1-9%

Other ingredients determined not to be hazardous. All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS) and the National Registration Authority (NRA) approved active constituents.

4. FIRST AID MEASURES

Poisons Schedule Number: S5

Poisons Information Centre in each State capital can provide additional assistance for scheduled poisons. Ph. 13 11 26.

Ingestion: If swallowed do not induce vomiting. Rinse mouth with water, give glass of water and seek medical attention.

Eye: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

Skin: Remove contaminated clothing and footwear. Wash skin thoroughly with water. If swelling, redness, blistering or irritation occurs seek medical attention.

Inhalation: Remove victim from exposure to fresh air. If breathing becomes difficult give artificial respiration and seek medical attention.

Note to Physician: Treat the patient symptomatically.

5. FIRE FIGHTING MEASURES

Flash point: 112°C

Decomposition

Temperature: >200°C

Extinguishing Media : Water, foam, dry chemical powder or Carbon Dioxide.

Specific Hazards : The material is stable under normal conditions. Hazardous polymerisation can occur on heating. On decomposition gives off carbon dioxide, carbon monoxide, oxides of nitrogen, volatile amines and ammonia. Wear full protective clothing.

Fire Fighters : Wear positive pressure, self-contained breathing apparatus and full protective clothing.

Additional Information: Hazchem code – 2X

6. ACCIDENTAL RELEASE MEASURES

Small Spills: Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local council statutory codes.

Large Spills: Shut off all possible ignition sources. Wear protective equipment to prevent skin and eye contamination. Clean with absorbent material like sand, soil, vermiculite or any other inert material. Avoid contamination of drains, sewerage and waterways. Collect and seal in properly labelled containers for disposal as per local statutory codes. If contamination of crops, waterways, drains or sewerage has occurred, advise Emergency Services or State Department of Agriculture

7. HANDLING & STORAGE

Storage: Store in the closed, original container in a cool ventilated area. Keep containers tightly closed when not in use. Keep away from explosives, food, oxidising agents and organic peroxides. This product is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations. Avoid from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value assigned for this specific product by the National Occupational and Safety Commission (Worksafe Australia). However, supplier recommended Hygiene Standard as under :

Material	TWA		STEL		Notices
	ppm	mg/m ³	ppm	mg/m ³	
Isophoronediamine	N/E*	N/E*	N/E*	N/E*	-

N/E* = No Exposure Standard has been established for this product.

Engineering Controls: Special ventilation is not normally required due to the low volatility of the product at normal temperature. However, in the operation of certain equipment or at elevated temperatures, mists or vapours may be generated and exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standards or where no exposure standard is allocated, as low as reasonably practicable.

Personal Protection: Use overalls, safety shoes, safety goggles, rubber or chemical resistance gloves and respirator if required.

Manufacturing,
Packaging &
Transport:

Avoid skin and eye contact and the inhalation of vapour. Wear overalls, safety goggles and impervious gloves. Available information suggests that the gloves made from PVC should be suitable for intermittent contact, however, due to variations in glove construction and local conditions, the final assessment should be made by the user. If inhalation risk exists, wear organic vapour respirator meeting requirements of AS/NZ 1715 and 1716. Always wash hands with soap and water before smoking, eating, drinking or using toilet facilities.

Preparations &
Use of Product: Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale mist or vapours. After each day's use wash gloves, safety goggles and all the contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear pale liquid
Solubility: Miscible in water and other solvents
Specific Gravity: 0.98 - 0.99 @ 25°C
Boiling Point: >247 °C @ 25°C
Relative Vapour
Density: 7 (air=1)
Melting Range: Not established
Vapour Pressure: <0.01Pa (20 °C)
Decomposition
Temperature: >200 °C
Flash Point: >200 °C (ASTM D 93)
Flammability Limits: Upper limit not established. Lower limit of 1.2%
Ph: 11.6 (10g/L water)
Autoignition Temperature: 380 °C
% Volatile by Volume: Nil
(All above values are Typical Values only)

10. STABILITY AND REACTIVITY

The product is stable under normal conditions and use.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Acute Effects

Ingestion: Harmful if swallowed. May cause gastrointestinal discomfort and irritation.
Eye: Brief contact may cause mild irritation to eyes.
Skin: Irritant and poorly absorbed through the skin. Prolonged and repeated contact may cause severe irritation and/or dermatitis.
Inhaled: Not hazardous at ambient temperatures. Vapours generated at elevated temperatures or when inhaled repeatedly may cause irritation to nose, throat and respiratory tract.
Long Term Effects: Repeated skin contact and inhalation may result in

sensitisation in some individuals. May cause allergic reaction, dermatitis or asthma like symptoms. Follow good work practices. Avoid ingestion, inhalation, eye and skin contact. Wash hands with soap and water before eating, drinking, smoking or using toilet facilities.

Acute & Chronic Toxicity:

Negative in a battery of mutagenicity assays.
No evidence of carcinogenicity was observed in long term studies of rats.
No development nor reproductive effects in rat and rabbit.
Acceptable Daily Intake (ADI) for humans is 0.01mg/kg/day

12. ECOLOGICAL INFORMATION

Avoid contamination of drains, sewerage, creeks and waterways.
Product may be toxic to aquatic organisms.

17. DISPOSAL CONSIDERATIONS

Dispose of all empty containers as per State & Council Regulations. Do not dispose near waterways, vegetation and tree roots. Empty containers and product should not be burned.

18. TRANSPORT INFORMATION

UN Number: 2289
Shipping Name: Isophorondiamine
D.G. Class: 8
Subsidiary Risk: Nil
Packaging Group: III
Hazchem Code: 2X
EPG: 8A1 or Guide 36
Segregation: Not to be loaded with explosives, oxidising agents or organic peroxides

For road, marine and air transport this product is classified as corrosive goods within the context of National & International Transport Regulations.

19. REGULATORY INFORMATION

Risk & Safety Phrases listed in Section 2
Classified as Hazardous according to the criteria of Worksafe Australia
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods By Road and Rail.
Classified as a Scheduled Poison S5 according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)

The National Standard for the Storage and Handling of Workplace Dangerous Goods
{NOHSC : 1015 (2001)}

20. OTHER INFORMATION

Keep out of reach of children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use and storage of the product under every foreseeable condition.

Website: www.tremco.com.au

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