



# MATERIAL SAFETY DATA SHEET

Issue date: 2<sup>nd</sup> September, 2011

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: TREMproof<sup>®</sup> 200 EC RESIN**

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 7am to 5pm Monday to Friday inclusive  
Product Code: 225200  
Recommended Use: Resin component for two part waterborne epoxy coating

## 2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF NOHSC.  
CLASSIFIED AS NON-DANGEROUS GOODS ACCORDING TO THE CRITERIA OF THE ADG CODE

Symbols: Xi Irritant  
N Environmentally hazardous substance  
Risk Phrase (s): R36/38 Irritating to skin and eyes  
R43 May cause sensitization by skin contact  
R51 Toxic to aquatic organisms  
R53 May cause long term adverse effects in the aquatic environment  
Safety Phrase (s): S24 Avoid contact with skin  
S26 in case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S28 After contact with skin, wash immediately with plenty of water  
R36/39 Wear suitable gloves and eye/face protection.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS Number:	Proportion:
Bisphenol A/epichlorohydrin resin, liquid	25068-38-6	30 - 60%
Non hazardous ingredients		To 100%

## 4. FIRST AID MEASURES

General information: In case of adverse health effects seek medical advice.  
Swallowed: If swallowed, do **NOT** induce vomiting. Immediately wash out mouth with water and then give plenty of water to drink. Seek immediate medical advice.  
Eye: If in eyes, hold eyes open, flood with water for at least 15 minutes.  
Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water. Ensure contaminated

clothing is washed before re-use. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for treatment.

Inhaled: Keep victim calm and remove to fresh air if it is safe to do so. If not breathing, apply artificial respiration and seek medical treatment immediately.

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## 5. FIRE FIGHTING MEASURES

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Suitable Extinguishing Media: Foam, extinguishing powder, carbon dioxide.

Hazards from Combustion Products: Nitrous gases, carbon monoxide.

Precautions For Fire Fighters & Special Protective Equipment: Wear contained breathing apparatus

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## 6. ACCIDENTAL RELEASE MEASURES

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Observe all local and national regulations

Emergency procedures: Extinguish or remove all sources of ignition and stop leak and spread of spill if safe to do so. Do not allow product to enter drains, sewers or water courses - inform the local authorities if this occurs.

Methods and materials for containment and cleanup: Contain the spill with sand or earth and take up with a vacuum truck or absorb with absorbent material, sand or earth. Place used absorbent in suitable sealed containers and follow state or local authority regulations and guidelines for disposal of the waste. Clean area with detergent and water.

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## 7. HANDLING & STORAGE

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Precautions for safe handling: Ensure good ventilation at the workplace. Wash hands and remove contaminated clothing and protective equipment before eating, drinking, smoking or using the toilet

Conditions for safe storage: Keep container tightly closed. Store product between 15-30°C in a dry environment and out of direct sunlight. Do not allow product to freeze.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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National Exposure Standards: No exposure standards have been established for this product by Worksafe Australia

Biological limit value: No biological limit allocated  
Engineering controls: Special ventilation is not normally required due to the low volatility of the product at normal temperatures. However, in the operation of certain equipment or at elevated temperatures, mists or vapour may be generated and exhaust ventilation should be provided to maintain airborne concentration levels as low as is reasonably practicable.

Personal protective Equipment (PPE): Avoid contact with the skin and eyes, and avoid breathing vapours or mists. When exposure is likely, personal protective equipment in a combination appropriate to the degree and nature of exposure, should be selected from the following list:-  
(1) Safety glasses  
(2) Neoprene, butyl rubber gloves  
(3) Long sleeve shirts and trousers  
(4) Leather boots

#### CONTAMINATION

If contamination occurs, change clothing taking care to avoid skin contact with the contaminated area, and discard internally contaminated gloves and footwear. Launder contaminated clothing before reuse. Observe good personal hygiene, in particular, wash hands and remove contaminated clothing and protective equipment before eating, drinking, smoking or using the toilet.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	White coloured homogeneous liquid
Odour	Epoxy
pH:	No information
Vapour Pressure:	No information
Vapour Density:	No information
Boiling Point (°C):	>100°C
Freezing/Melting Point (°C):	0°C
Solubility:	Miscible with water
Specific Gravity:	1.26 – 1.28kg/l
Flammability:	Non flammable
Viscosity:	15,000 – 25,000cps

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## 10. STABILITY AND REACTIVITY

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Chemical Stability:	Stable
Conditions to avoid:	Not applicable.
Incompatible Materials:	Oxidising agents (e.g perchlorates, nitrates etc.,)
Hazardous	
Decomposition Products:	Oxides of carbon and noxious smoke products
Hazardous Reactions:	Hazardous reactions will not occur

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## 11. TOXICOLOGICAL INFORMATION

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Health effects from the likely routes of exposure:	Acute data	Not established for this product
	Eyes	Possible chemical related eye burns resulting in cloudy appearance of the cornea, pain, impairment or loss of vision
	Skin	Allergic skin effects such as redness, swelling, blistering and itching. Dermal effects may result in a change in skin pigmentation and/or colouration. Some individuals may experience severe skin reactions resulting in redness, swelling, itching, dryness, cracking, blistering and pain.
	Inhalation	Upper respiratory tract irritation may result in cough, sneezing, nasal discharge, headache, hoarseness and nose and throat pain.
	Ingestion	Irritation of the gastrointestinal tract may result in pain, abdominal tenderness, nausea, diarrhea and vomiting.
	Reproductive	Limited evidence
	Other	The following information is based on the Bisphenol A/epichlorohydrin resin: Oral (rat) LD50: 11400 mg/kg Dermal (mouse) LD50: 16600mg/kg activation.

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## 12. ECOLOGICAL INFORMATION

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Ecotoxicity:	May cause long term adverse effects in the aquatic environment
Mobility:	Sinks in water
Persistence/Biodegradability:	Not readily biodegradable, has the potential to bioaccumulate

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### 13. DISPOSAL CONSIDERATIONS

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Disposal Methods  
And containers: Follow state or local regulations and guidelines for disposal of the waste. Clean area with detergent and water. Do not allow product to enter drains, sewers or water courses – inform the local authorities if this occurs.

Special precautions for  
Landfill and incineration: None established for this product

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### 14. TRANSPORT INFORMATION

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UN Number: None  
Proper Shipping Name: None  
Class:  
Subsidiary Risk: None  
Packing Group: None  
Hazchem Code: None  
Special Precautions  
for User: Keep container tightly closed. Store product between 15-30°C in a dry environment and out of direct sunlight. Do not allow product to freeze.

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### 15. REGULATORY INFORMATION

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Poisons Schedule: S5  
Regulations Bisphenol A/epichlorohydrin resin (CAS: 26068-38-6) is found on the following regulatory lists:

- Australian Inventory of Chemical Substances (AICS)  
Australian Poisons Schedule.

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### 16. OTHER INFORMATION

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For Industrial Use only. 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](http://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 documents 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: 2nd September, 2011

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: TREMproof® 200 EC HARDENER**

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 7am to 5pm Monday to Friday inclusive  
Product Code: 225200  
Recommended Use: Hardener component for two part waterborne epoxy coating

## 2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF NOHSC.  
CLASSIFIED AS NON-DANGEROUS ACCORDING TO THE CRITERIA OF THE ADG CODE

Symbols: Xi Irritant  
Risk Phrase (s): R43 May cause sensitization by skin contact  
Safety Phrase (s): S36/37 Wear suitable protective clothing and gloves.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS Number:	Proportion:
Fatty acids, C18-unsatd, dimers, reaction products		
With polyethylenepolyamines	68410-23-1	10 - <30%
Triethylenetetramine	112-24-3	<2%
Polyamine	Prop.Comp.	<2%
Non hazardous ingredients		To 100%

## 4. FIRST AID MEASURES

General information: In case of adverse health effects seek medical advice.  
Swallowed: If swallowed, do **NOT** induce vomiting. Immediately wash out mouth with water and then give plenty of water to drink. Seek immediate medical advice.  
Eye: If in eyes, hold eyes open, flood with water for at least 15 minutes.  
Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water. Ensure contaminated clothing is washed before re-use. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for treatment.  
Inhaled: Keep victim calm and remove to fresh air if it is safe to do so. If not breathing, apply artificial respiration and seek medical treatment immediately.

First Aid Facilities: Potable water should be available to rinse eyes or skin.  
Provide eye baths and safety showers.  
Advice to Doctor Treat symptomatically.  
Additional Information: None available

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## 5. FIRE FIGHTING MEASURES

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Suitable Extinguishing Media: Foam, extinguishing powder, carbon dioxide.  
Hazards from Combustion Products: Nitrous gases, carbon monoxide.  
Precautions For Fire Fighters & Special Protective Equipment: Wear -contained breathing apparatus

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## 6. ACCIDENTAL RELEASE MEASURES

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Observe all local and national regulations

Emergency procedures: Extinguish or remove all sources of ignition and stop leak and spread of spill if safe to do so. Do not allow product to enter drains, sewers or water courses - inform the local authorities if this occurs.

Methods and materials for containment and cleanup: Contain the spill with sand or earth and take up with a vacuum truck or absorb with absorbent material, sand or earth. Place used absorbent in suitable sealed containers and follow state or local authority regulations and guidelines for disposal of the waste. Clean area with detergent and water.

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## 7. HANDLING & STORAGE

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Precautions for safe handling: Ensure good ventilation at the workplace. Wash hands and remove contaminated clothing and protective equipment before eating, drinking, smoking or using the toilet  
Conditions for safe storage: Keep container tightly closed. Store product between 15-30°C in a dry environment and out of direct sunlight. Do not allow product to freeze.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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National Exposure Standards: No exposure standards have been established for this product by Worksafe Australia

Biological limit value: No biological limit allocated  
Engineering controls: Special ventilation is not normally required due to the low volatility of the product at normal temperatures. However, in the operation of certain equipment or at elevated temperatures, mists or vapour may be generated and exhaust ventilation should be provided to maintain airborne concentration levels as low as is reasonably practicable.

Personal protective Equipment (PPE): Avoid contact with the skin and eyes, and avoid breathing vapours or mists. When exposure is likely, personal protective equipment in a combination appropriate to the degree and nature of exposure, should be selected from the following list:-

- (1) Safety glasses
- (2) Neoprene, butyl rubber gloves
- (3) Long sleeve shirts and trousers
- (4) Leather boots

**CONTAMINATION**

If contamination occurs, change clothing taking care to avoid skin contact with the contaminated area, and discard internally contaminated gloves and footwear. Launder contaminated clothing before reuse. Observe good personal hygiene, in particular, wash hands and remove contaminated clothing and protective equipment before eating, drinking, smoking or using the toilet.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance:	White coloured homogeneous liquid
Odour	Ammoniacal
pH:	11-12
Vapour Pressure:	No information
Vapour Density:	No information
Boiling Point (°C):	>100°C
Freezing/Melting Point (°C):	0°C
Solubility:	Completely miscible with water
Specific Gravity:	1.26 – 1.28kg/l
Flammability:	Non flammable
Viscosity:	15,000 – 25,000cps

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## 10. STABILITY AND REACTIVITY

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Chemical Stability:	Stable
Conditions to avoid:	Not applicable.
Incompatible Materials:	Oxidising agents (e.g perchlorates, nitrates etc.)
Hazardous	
Decomposition Products:	Oxides of carbon and noxious smoke products
Hazardous Reactions:	Hazardous reactions will not occur

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## 11. TOXICOLOGICAL INFORMATION

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Health effects from the likely routes of exposure:	Acute data	Not established for this product
	Eyes	Possible chemical related eye burns resulting in cloudy appearance of the cornea, pain, impairment or loss of vision
	Skin	Allergic skin effects such as redness, swelling, blistering and itching. Dermal effects may result in a change in skin pigmentation and/or colouration. Some individuals may experience severe skin reactions resulting in redness, swelling, itching, dryness, cracking, blistering and pain.
	Inhalation	Upper respiratory tract irritation may result in cough, sneezing, nasal discharge, headache, hoarseness and nose and throat pain.
	Ingestion	Irritation of the gastrointestinal tract may result in pain, abdominal tenderness, nausea, diarrhea and vomiting.
	Reproductive	Triethylenetetramine (TETA) was fetotoxic and teratogenic when fed to rats at 0.83% and 1.67% of diet, when applied to broken skin of pregnant guinea pigs, there was a 90% abortion rate or death of foetus with secondary to copper deficiency, resulting from the chelating activity of TETA.
	Other	Acute oral LD50 - > 5g/kg Acute dermal LD50 - > 8g/kg Acute inhalation LC50 - No data available. Triethylenetetramine (TETA) has been found to be a direct acting mutagen in the Ames assay. It gave positive results with and without activation.

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## 12. ECOLOGICAL INFORMATION

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Ecotoxicity:	May cause long term adverse effects in the aquatic environment
Mobility:	Not established for this product
Persistence/Degradability:	Not established for this product

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## 17. DISPOSAL CONSIDERATIONS

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Disposal Methods And containers:	Follow state or local regulations and guidelines for disposal of the waste. Clean area with detergent and water. Do not allow product to enter drains, sewers or water courses – inform the local authorities if this occurs.
Special precautions for Landfill and incineration:	None established for this product

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## 18. TRANSPORT INFORMATION

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UN Number:	None
Proper Shipping Name:	None
Class:	
Subsidiary Risk:	None
Packing Group:	None
Hazchem Code:	None
Special Precautions for User:	Keep container tightly closed. Store product between 15-30°C in a dry environment and out of direct sunlight. Do not allow product to freeze.

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## 19. REGULATORY INFORMATION

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Poisons Schedule:	No Poisons Schedule Number allocated Triethylenetetramine (CAS: 112-24-3) is found on the following regulatory lists: <ul style="list-style-type: none"><li>Australian Inventory of Chemical Substances (AICS) Australian Poisons Schedule.</li></ul>
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## 20. OTHER INFORMATION

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For Industrial Use only. 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](http://www.tremco.com.au)

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