



# MATERIAL SAFETY DATA SHEET

Issue date: 11<sup>th</sup> June, 2008

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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**Product Name: TREMCoat HB 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: 225301  
Recommended  
Use: Hardener component for two part high build epoxy coating  
Packaging: 10L Pail  
Other Names: Ecopoxy 2200 Hardener

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## 2. HAZARDS IDENTIFICATION

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

Symbols: C Corrosive  
Xi Irritant  
N Dangerous to environment

Risk Phrase (s): R21 Harmful in contact with skin  
R22 Harmful if swallowed  
R34 Causes burns  
R36/38 Irritating to eyes and skin  
R43 May cause sensitisation by skin contact  
R42 Toxic to aquatic organisms  
R53 May cause long term adverse effects to the aquatic environment

Safety Phrase (s): S2 Keep out of reach of children  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S36/37 Wear suitable protective clothing and gloves  
S39 Wear eye/face protection  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S61 Avoid release to the environment, refer to instructions or Material Safety Data Sheet

**Chronic Effects:** Prolonged or repeated contact may result in skin sensitization.

**Inhalation:** Inhalation of the vapours (generated at elevated temperatures) or mists can cause irritation to the nose and throat and upper respiratory tract.

**Ingestion:** May be harmful if swallowed in large amounts. Ingestion may cause nausea, diarrhoea, abdominal pain and vomiting.

**Skin:** Irritating to the skin. Frequent and prolonged contact can cause skin sensitization.

**Eye:** Substance is irritating to the eyes. Contamination of the eyes will result in transient pain, lachrymation and redness.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name:	CAS Number:	Proportion:
Isophoronediamine	2855-13-2	30-60%
Benzyl Alcohol	100-51-6	10-30%
Nonyl Phenol	25154-52-3	10-30%
Ingredients determined to be not hazardous		<1%

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### 4. FIRST AID MEASURES

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General information: In case of adverse health effects seek medical advice.

Swallowed:	If swallowed, do <b>NOT</b> 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 large amounts of water for at least 15 minutes. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attention.
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 irritation persists, seek immediate medical attention.
Inhaled:	Keep victim calm and remove to fresh air if it is safe to do so. If not breathing, apply artificial respiration and seek urgent medical advice.
First Aid Facilities:	Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers and normal washroom facilities.
Advice to Doctor	Treat symptomatically. If skin sensitization has developed and a casual relationship has been confirmed, further exposure should not be allowed.

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### 5. FIRE FIGHTING MEASURES

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Flashpoint:	>200°C
Ignition Temperature:	Not available
Flammable limits UEL:	Not available
Suitable Extinguishing Media:	Foam, extinguishing powder, carbon dioxide.
Unusual Fire & Explosion Hazards;	None known
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 and precautions from other sections of this Material Safety Data Sheet.

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. Ensure a high level of personal hygiene is maintained when using this product. That is, always 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 away from strong bases and amines.

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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.

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) 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:	Clear and white liquid with a HBright odour
Flashpoint:	<200°C
Vapour Pressure:	Not available
Vapour Density:	Not available
Boiling Point (°C):	Not available
Melting Point (°C):	Not applicable
Solubility in water:	Negligible
Specific Gravity:	Not available
Viscosity:	1,100 – 1,400 centipose @ 25°C
Density:	0.90 – 1.10Kg/m <sup>3</sup> @ 25°C

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## 10. STABILITY AND REACTIVITY

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Chemical Stability:	Stable
Conditions to avoid:	Not applicable.
Hazardous	
Decomposition Products:	Oxides of carbon and noxious smoke products
Hazardous Reactions:	Hazardous reactions will not occur

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## 11. TOXOCOLOGICAL INFORMATION

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Health effects from the likely routes of exposure:

Eyes	Possible chemical related eye burns resulting in cloudy appearance of the cornea, chemical burns, 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, diarrhoea and vomiting.
Reproductive	No effects known. Does not contain chemicals implicated in adverse reproductive effects.
Other Information	None established.

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## 12. ECOLOGICAL INFORMATION

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Ecotoxicity:	Not established for this product
Mobility:	Not established for this product
Persistence/Degradability:	Not established for this product

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## 13. DISPOSAL CONSIDERATIONS

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Disposal Methods And containers:	Disposal of this material should be undertaken by a registered chemical disposal company. 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.
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## 14. TRANSPORT INFORMATION

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UN Number:	2735
Proper Shipping Name:	Amines. Liquid. Corrosive. Contains Isophoronediamine and Benzyl Alcohol
Class:	8
Subsidiary Risk:	None allocated
Packing Group:	III
Hazchem Code:	3X
Poisons Schedule:	S5
Transport information:	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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## 15. REGULATORY INFORMATION

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Risk & Safety Phrases listed in Section 2.

Hazard Designation of product:

C Corrosive  
Xi Irritant  
N Dangerous to environment

If used according to manufacturer's conditions this product is safe to use, however, persons known to be hypersensitive (asthma, chronic bronchitis) should not use this product.

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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 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: 16th June, 2008

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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**Product Name: TREMCoat HB 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: 225301  
Recommended Use: Resin component for two part high build epoxy coating

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## 2. HAZARDS IDENTIFICATION

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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

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): S2 Keep out of reach of children  
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  
S37/39 Wear suitable gloves and eye/face protection  
S61 Avoid release to the environment, refer to instructions or Material Safety Data Sheet

**Chronic Effects:** Prolonged or repeated contact may result in skin sensitization.

**Inhalation:** Inhalation of the vapours (generated at elevated temperatures) or mists can cause irritation to the nose and throat and upper respiratory tract.

**Ingestion:** May be harmful if swallowed in large amounts. Ingestion may cause nausea, diarrhoea, abdominal pain and vomiting.

**Skin:** Irritating to the skin. Frequent and prolonged contact can cause skin sensitization.

**Eye:** Substance is irritating to the eyes. Contamination of the eyes will result in transient pain, lachrymation and redness.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name:	CAS Number:	Proportion:
Bisphenol A epichlorohydrin resin	25068-36-6	50 - 60%
Bisphenol F epichlorohydrin resin	28064-14-4	20 - 30%
C12-C14 Alkylglycidyl ether	68081-84-5	To 100%

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### 4. FIRST AID MEASURES

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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 large amounts of water for at least 15 minutes. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attention.
- 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 irritation persists, seek immediate medical attention.
- Inhaled: Keep victim calm and remove to fresh air if it is safe to do so. If not breathing, apply artificial respiration and seek urgent medical advice.
- First Aid Facilities: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers and normal washroom facilities.
- Advice to Doctor: Treat symptomatically. If skin sensitization has developed and a casual relationship has been confirmed, further exposure should not be allowed.

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### 5. FIRE FIGHTING MEASURES

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- Flashpoint: >150°C
- Ignition Temperature: Not available
- Flammable limits UEL: Not available
- Suitable Extinguishing Media: Foam, extinguishing powder, carbon dioxide.
- Unusual Fire & Explosion Hazards; Combustible. Keep storage tanks, pipelines, fire exposed surfaces etc., cool with water spray. Shut off any leak if safe to do so and remove sources of ignition.
- Precautions For Fire Fighters & Special Protective Equipment: Wear -contained breathing apparatus

Hazards Flammability: Class C2 Combustible liquid, will not burn unless preheated. Isolate from sources of heat, naked flames or sparks. Refer to AS 1940 - Storage and handling of flammable and combustible liquids and AS 2865 - Safe working in a confined space, for more specific information on these subjects.

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## **6. ACCIDENTAL RELEASE MEASURES**

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Observe all local and national regulations

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

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## **7. HANDLING & STORAGE**

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Precautions for safe handling: Ensure a high level of personal hygiene is maintained when using this product. That is, always wash hands and remove contaminated clothing and protective equipment before eating, drinking, smoking or using the toilet

Conditions for safe storage: Classified as a class C2 combustible liquid for storage and handling purposes. Store in a well ventilated place away from ignition sources, oxidising agents, foodstuffs and clothing. Keep containers closed when not in use.

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## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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Exposure Limits: No exposure standards have been established for this product by NOHSC.

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 HBeeve 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. Eye wash fountains and safety showers should be available for emergency use.

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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	Pale yellow liquid
Odour	HBight
Vapour Pressure:	Not available
Vapour Density (Air=1):	Not available
Density:	1.10-1.15kg/l @ 25°C
Boiling Point (°C):	Not available
Melting Point (°C):	Not applicable
Solubility in Water::	Negligible
Specific Gravity:	Not available
Viscosity:	700-1100 centipoise @ 25°C

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## 10. STABILITY AND REACTIVITY

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Hazardous Decomposition

Or Byproducts:

Oxides of carbon and noxious smoke products

Hazardous Reactions:

Stable under normal conditions. Reacts with strong oxidising agents. Polymerises exothermically with amines, mercaptans and Lewis acids at ambient temperatures and above. Polymerises in contact with caustic soda. Reacts exothermically with bases (eg. caustic soda), ammonia, primary and secondary

amines, alcohols and acids.

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## 11. TOXICOLOGICAL INFORMATION

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Oral : LD50>2000 mg/kg  
Dermal : LD50>2000 mg/kg  
Not carcinogenic  
Mutagenicity : Positive in in vitro, negative in in vivo

Health effects from the  
likely routes of exposure:

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.
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, diarrhoea and vomiting.
Reproductive	Not known. Does not contain chemicals implicated in adverse reproductive effects.

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## 12. ECOLOGICAL INFORMATION

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Information on Ecological Effects:

- Mobility. Sinks in water
- Not readily biodegradable. Has the potential to bioaccumulate
- Acute toxicity (fish Toxic,  $1 < LC50 < 10\text{mg/l}$ )
- Sewerage treatment EC50 > 1-10 mg/l, to organisms in sewage treatment plants
- Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

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## 17. DISPOSAL CONSIDERATIONS

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Disposal of this material should be undertaken by a registered chemical disposal company.

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## 18. TRANSPORT INFORMATION

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UN Number: 3082  
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES,  
LIQUID, N.O.S. (CONTAINS BISPHENOL  
EPICHLOROHYDRIN RESIN)  
DG Class: 9  
Subsidiary Risk: None allocated  
Poisons Schedule: None allocated  
Packing Group: III  
Hazchem Code: 2X  
Transport Information: Not classified as a Dangerous Good according to the  
Australian Code for the Transport of Dangerous Goods  
by Road and Rail.

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## 19. REGULATORY INFORMATION

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Risk & Safety Phrases listed in Section 2.

If used according to manufacturer's conditions this product is safe to use, however, persons known to be hypersensitive (asthma, chronic bronchitis) should not use this product.

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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)

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.