

MATERIAL SAFETY DATA SHEET

TREMproof® BS3

Issue Date: 17 July 1998

Re-issue date: 1st July, 2000

Re-issue date: 1st July, 2005

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STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to criteria of Worksafe Australia. Classified as an Article.

COMPANY DETAILS

Company: Tremco Pty Limited
Address: Unit 1, 2 Park Rd, RYDALMERE NSW 2116
Telephone no: 02 96382755
Facsimile no: 02 96382955
Emergency Telephone no: 1800224512 (business hours only)

IDENTIFICATION

Product Name: TREMproof® BS3

U.N. No: None allocated
Hazard Code: None allocated.
Correct Shipping Name: None allocated.
Dangerous Goods Class and Subsidiary Risk: None allocated.
Packaging Group: None allocated
Poisons Schedule: None allocated

Recommended Use: Preformed waterproofing membranes. Applied by gas flame torch.

Ingredients:

Chemical entity	CAS No.	Proportion
Bitumen	[8052-42-4]	30-60%
Polypropylene copolymer	[9003-07-0]	10-30%
Calcium carbonate	[471-34-1]	10-30%
Petroleum oil, naphthenic	[64742-62-7]	<15%
Polypropylene homopolymer	[9003-07-0]	<10%
Fibreglass mat		<10%

Physical Data:

Appearance: Black sheet/roll.
Odour: Nil when cold; distinctive odour when hot.
Boiling Point (°C): Not available.
Vapour Pressure: Not available.
Specific Gravity: 1.1 approx.
Flash Point (°C): >200
Flammability Limits: LEL: Not available.
(% by vol) UEL: Not available.
Solubility in Water: Nil
pH: Not relevant.
Percent Volatiles (by wt.): 0

HEALTH HAZARD INFORMATION

1. TREMproof® BS3 at ambient temperatures**HEALTH EFFECTS**

Ingestion:	Ingestion of material is extremely unlikely. Likely to be of low order of acute toxicity.
Eye:	None expected under normal operating conditions.
Skin:	No significant hazard.
Inhalation:	None expected under normal conditions.

FIRST AID

Ingestion:	Seek medical advise.
Eye:	Flush with copious amounts of cold running water, while holding the eyelids open, for 15 minutes or until irritation subsides.
Skin:	Use propriety handcleaner followed by soap and water.
Inhalation:	Not applicable.

2. TREMproof® BS3 at high temperatures

During the application of TREMproof® BS3 (ie. gas flame torching) the hazard of small amounts of hot bituminous material exists. The following health effects and first aid refers to this hazard. For further information on bitumen see M.S.D.S. on Floatine Bitumen.

HEALTH EFFECTS

Ingestion:	Ingestion is extremely unlikely and the major hazard will result from burning due to the hot material.
Eye:	Will cause severe burning to the eyes.
Skin:	Will cause severe burns.
Inhalation:	Slightly toxic. May cause irritation of the nose and throat.

FIRST AID

Ingestion:	Flush mouth etc. out with copious amounts of water. Do NOT induce vomiting. Give a glass of water. Obtain medical attention immediately.
Eye:	Flush immediately with copious amounts of running water, while holding the eyelids open, for at least 15 minutes. No attempt should be made to remove the bitumen. Obtain medical attention immediately.
Skin:	If hot bitumen strikes the skin drench or immerse the area in water (preferably cold running water). If available, apply ice water or ice packs to the area. (Do not use iced water or cold packs if the burned area covers more than 10% of the body, as this may contribute to shock). Alternatively apply cold wet towels to the burnt area and change frequently to maintain cooling. Cooling should be maintained for no longer than 30 minutes. When hot bitumen completely encircles a limb, (this is an unlikely situation when applying TREMproof® BS3 it may have a tourniquet effect and should be split as it cools. Once the bitumen cools it will do no further harm and in fact provides a sterile covering over a burnt area. Obtain medical attention immediately.
Inhalation:	Remove person from exposure to fresh air.

Advice to Doctor

Aspiration:	Low-grade chemical pneumonitis may occur.
Inhalation:	Moderate irritation of nasal and upper respiratory tract from the vapours of hot bitumen.
Burns:	No attempt should be made to remove the bitumen (it acts as a sterile dressing). Cover the bitumen with tulle gras and leave for two days when any detached bitumen can be removed. Re-dress and leave for a further week. If necessary refer to a burns unit.

Chronic exposure effects of bitumen

None anticipated under normal conditions of use. In 1984 the International Agency for Research on Cancer (IARC) reviewed the published literature on bitumen and found limited to sufficient evidence of carcinogenicity for some bitumens in certain species of experimental animals. While there was inadequate evidence of carcinogenicity in humans the IARC classified bitumens as possibly carcinogenic to animals. Almost all studies have been in relation to skin exposure and not to inhalation.

PRECAUTIONS FOR USE

Exposure Limits:	None assigned. The ACGIH TWA TLV for bitumen fumes is 5mg/m ³ of total particulate matter. Under normal conditions the TLV is unlikely to be exceeded.
Ventilation:	When handling hot bitumen always provide adequate ventilation. In most application sites natural ventilation is satisfactory but in confined areas mechanical ventilation may be necessary.
Personal Protection:	Hot bitumen - Avoid inhalation of fumes or vapours. Avoid skin contact. Contaminated clothing should be removed and laundered before re-use. Wash hands thoroughly after handling. Protective clothing should be worn at all times: 1)Leather boots - rubber soled. 2)Long trousers. 3)Longed sleeved shirt. 4)Gauntlet style leather gloves. 5)Clear face shield is advisable. Respiratory protection is not necessary under normal well ventilated conditions. In situations where inhalation risk of overexposure exists, (due to high vapour levels) wear Standards Association of Australia (SAA) approved respirator (suitable for organic vapours). Correct fit is essential to obtain adequate protection. Ideally cold running water should be easily and quickly accessible from the working area, case of bitumen burns. If not at least two 20 litre buckets of cold water MUST be provided.
Flammability:	Non flammable, but combustible. It is good practise to have a carbon dioxide or dry chemical fire extinguisher located close at hand when using flame torches.

STORAGE AND TRANSPORT

Transport: This product is not classified as a dangerous good under the provisions of the “Australian Code for the Transport of Dangerous Goods by Road and Rail”.

Storage: Store undercover. Store rolls upright in direction indicated on label. Store away from materials listed below.

Reactivity Data

Stability: Stable

Materials to avoid: Attacked by petrochemicals, although not a dangerous reaction. At elevated temperatures bitumen will react violently with water.

Hazardous decomposition products: Thermal decomposition, see Fire Hazard.

SPILLS AND DISPOSAL

Transfer to appropriate container for disposal. Non-hazardous solid waste. Assure conformity with applicable disposal regulations. Dispose of material at an approved disposal site or facility.

FIRE EXPLOSION HAZARD

Flammability: Non flammable.

Extinguishing media: Use dry chemical, foam or carbon dioxide to fight fires. Use water spray to cool fire exposed surfaces and to protect personnel. At elevated temperatures bitumen will react violently with water. Minimise breathing gases, vapour, fumes or decomposition products. Use self contained air breathing equipment for enclosed areas.

Hazardous Decomposition: Fumes and smoke. Carbon monoxide and other unidentifiable compounds may be formed.

OTHER INFORMATION

Contact Point: OHS&E Officer

Telephone No: 1800224512

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MATERIAL SAFETY DATA SHEET

TREMproof® VBS

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Telephone no: 02 96382755
Facsimile no: 02 96382955
Emergency Telephone no: 1800224512 (business hours only)

IDENTIFICATION

Product Name: TREMproof® VBS

U.N. No: None allocated
Hazechem Code: None allocated.
Correct Shipping Name: None allocated.
Dangerous Goods Class and Subsidiary Risk: None allocated.
Packaging Group: None allocated
Poisons Schedule: None allocated

Recommended Use: Preformed waterproofing membranes.

Ingredients:

Chemical entity	CAS No.	Proportion
Bitumen	[8052-42-4]	Medium content (10-60%)
Calcium carbonate	[471-34-1]	Medium content (10-60%)
Petroleum oil		Low content (<10%)
Fibreglass mat		Low content (<10%)

Typical Physical Data:

Appearance: Black sheet/roll.
Odour: Nil (when cold)
Boiling Point (°C): Not applicable
Percent Volatiles (by wt.): 0
Specific Gravity: 1.2 approx.
Flash Point (°C): >200
Flammability Limits: Not applicable
(% by vol) Not applicable
Autoignition temperature(°C): >250
Sheet thickness (mm): 1.6 approx.
Roll weight (kg): 40 approx.
Roll size: 1m x 20m

HEALTH HAZARD INFORMATION**HEALTH EFFECTS**

- Ingestion:** Ingestion of material is extremely unlikely. Low order of toxicity.
- Eye:** Generally not applicable due to physical form. Not likely to cause any chemical irritation. Surfacing powder may cause physical irritation.
- Skin:** No significant hazard.
- Inhalation:** Inhalation of surfacing powder is a slight possibility. Exposure limits very unlikely to be exceeded under normal conditions of use.

CHRONIC EXPOSURE EFFECTS

None anticipated under normal conditions of use.

In depth information is contained in the CONCAWE (The Oil Companies' International Study Group for Conservation of Clean Air and Water - Europe) Report 7/82 - Health aspects of bitumens. This report found that bitumens (cold) posed no significant health hazard.

FIRST AID

- Ingestion:** Seek medical advice.
- Eye:** Flush with copious amounts of cold running water, while holding the eyelids open, for 15 minutes or until irritation subsides.
- Skin:** Use propriety handcleaner followed by soap and water.
- Inhalation:** Remove person to clean air. Generally not applicable under normal conditions of use.

PRECAUTIONS FOR USE

- Exposure Limits:** None assigned. The ACGIH TWA TLV for the calcium carbonate is 10mg/m³ of total dust (<1% SiO₂).
- Ventilation:** Always provide adequate ventilation.
- Personal Protection:** Generally not necessary. As part of good safety practices and industrial hygiene wear protective work clothing and shoes, launder soiled clothing before reuse and wash hands thoroughly after handling. Cotton gloves (or other types) can be worn to prevent hands being soiled. It may be necessary to wear protective glasses in windy conditions.
- Flammability:** Not flammable.

STORAGE AND TRANSPORT

Transport:	This product is not classified as a dangerous good under the provisions of the “Australian Code for the Transport of Dangerous Goods by Road and Rail”.
Storage:	Store undercover. Store rolls upright in direction indicated on label. Store away from materials listed below.
Reactivity Data	
Stability:	Stable
Materials to avoid:	Attacked by petrochemicals, although not a dangerous reaction.
Hazardous decomposition products:	Thermal decomposition, see Fire Hazard.
Spills and Disposal:	Transfer to appropriate container for disposal. Non-hazardous solid waste. Assure conformity with applicable disposal regulations. Dispose of material at an approved disposal site or facility.
Fire Explosion Hazard	
Flammability:	Non flammable.
Extinguishing media:	Use dry chemical, foam or carbon dioxide to fight fires. Use water spray to cool fire exposed surfaces and to protect personnel. Minimise breathing gases, vapour, fumes or decomposition products. Use self contained air breathing equipment for enclosed areas.
Hazardous Decomposition:	Fumes and smoke. Carbon monoxide, in the case of incomplete combustion.

OTHER INFORMATION

See MSDS on Floatine Bitumen when used in conjunction with TREMproof VBS.

Contact Point: OHS&E Officer
Telephone No: 1800224512

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