

Unifrax Australia Pty. Ltd.

326 Settlement Road
Thomastown, VIC 3074

ACN 093 625 757

Ph: (03) 9463 0000 Fax: (03) 9464 1176



INSULFRAX® VARIFORM

MATERIAL SAFETY DATA SHEET

No Classification under EEC Directive 76/548/EEC
Refer Worksafe Australia Classifying Clause 1.14.

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Product Name: Insulfrax® Variform

Ship. Name (CSN): None Allocated

Other Names: Carbowool Varicast
Carbowool Variform

UN Number: None Allocated
DG Class None Allocated
Packaging Group None Allocated
Hazchem Code None Allocated
Poisons Schedule Not Scheduled
Product Use Thermal Insulation Cement (Med/High Temperature)

Manufacturer/Supplier: Unifrax Limited
Mill Lane, Rainford
St. Helens
Merseyside 20 WA118L
UK

Unifrax Australia Pty. Ltd.
336 Settlement Road
Thomastown 3074
Victoria
Australia

Contact: See page 8.

2. HAZARDS IDENTIFICATION

Flammability
Fire Hazards: Non flammable

Explosive Hazards: Non explosive

Health Hazards: Irritating to eyes, skin, respiratory system and disturbances to Gastro intestines.

Authorised by: Alan Smith
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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients:	Name	CAS	Proportion
	Amorphous Alkaline earth Silicate Fibre (Glass Oxide)	65997-17-3	15-25%
	Fumed Silica	7631-86-9	5-15%
	Calcium aluminate cement (Cement, alumina)	65997-16-2	50-80%

4. FIRST AID MEASURES

Ingestion: Ingestion is unlikely, but if it does occur DO NOT induce vomiting; drink plenty of water.

Eye: Flush immediately with large amount of water for at least 15 minutes (remove any contact lenses). Eyelids should be held open away from the eyeball to ensure thorough rinsing. Do not rub eyes.

Skin: If skin becomes irritated, remove contaminated clothing. Wash areas of contact with soap and water. Do not rub or scratch exposed skin. Using a skin cream or lotion after washing may be helpful in reducing irritation.

Inhalation: Remove exposed person/s from source of exposure to fresh air. Recovery should be rapid, but if effects persist seek medical advice.

ADVICE TO DOCTOR: Treat symptomatically for irritant effects see 'Other Information – Toxicology'.

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5. FIRE FIGHTING MEASURES.

Fire Explosion Hazard: Not Flammable and non explosive.

**Hazardous Reactions/
Decomposition Products** Refer to SAFE HANDLING INFORMATION

Hazchem Code: None Allocated.

6. ACCIDENTAL RELEASE MEASURES

**Spills or Release
To the Environment** Pick up large dried pieces and place in containers. Where possible, use vacuum cleaner to clean up smaller spilled material. Refer to removal procedures in use and handling.

7. HANDLING & STORAGE

Storage Precautions: Keep dry. No special storage requirements.

Handling: In the *installation* of Insulfrax Variform, the following handling and installation procedures are recommended:

- a) All installation practices should be designed to minimise the liberation of any airborne fibre or dust.
- b) In large installations of several days/weeks duration, the installation area should be clearly designated and barriers erected to limit access.
- c) The Insulfrax Variform Materials should be stored in sealed plastic bags or similar containers until installation is to proceed. These containers should only be opened within the designated work area when work is to start.
- d) Where possible, materials should be delivered in sizes such that a minimum of handling is required. However when cutting or drilling is required, these should be

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7. Handling & Storage cont'd:

- done with hand tools fitted with local exhaust extraction.
- e) Empty storage bags should be folded and stored in a waste container along with any waste material.
 - f) Upon completion of the job, all excess materials should be sealed in bags prior to removal from the designated work area. The work area should be vacuumed using an industrial vacuum cleaner. Wet mopping and wiping can be utilised if an industrial vacuum cleaner is not available.

For **removal** of Insulfrax Variform materials the following handling procedures are recommended:

- a) All installation practices should be designed to minimise the liberation of any airborne fibre or dust.
- b) In large installations of several days/weeks duration, the installation area should be clearly designated and barriers erected to prevent access.
- c) Upon completion of the job, all excess materials should be sealed in bags prior to removal from the designated work area. The work area should be vacuumed using an industrial vacuum cleaner. Wet mopping and wiping can be utilised if an industrial vacuum cleaner is not available.
- d) With prolonged operations above the recommended use limit of 980° c, a small proportion of Insulfrax may transform to Wollastonite and disordered cristobalite warranting higher levels of dust control and respiratory protection.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Information: 0.5 fibre/ml for SMF; 2mg/m³ fumed silica (respirable dust);

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8. Exposure Controls & Personal Protection cont'd:

10mg/m³ calcium aluminate cement (inspirable dust),
(NOHSC 1995).

Personal Protection :

The National Code of Practice for the Safe Use of Synthetic Mineral Fibres (NOHSC May 1990) advises the use of the following PPE for installation and removal of both bonded and unbonded glasswool materials:

- a) Disposable coveralls or long sleeve, loose fitting clothing and gloves (launderable clothing should be washed separately from other clothing).
- b) Where overhead work is involved, goggles and head covering should be worn; and
- c) A half-face (P1 or P2) respirator should be worn during work in enclosed or poorly ventilated spaces, or where evidence suggests that respirable fibre levels may exceed 0.5 f/ml.

All respiratory devices should be tested for compliance with AS/NZS 1715 & AS/NZS 1716.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Tan fibrous mix - Nil odour
Melting Point	1330C
Boiling Point	Not applicable
Vapour Pressure	Not applicable
Specific Gravity	2.6
Flash Point	None
Flamm. Limit LEL	Not applicable
Solubility in Water	Insoluble, fibres slowly soluble in physiological solutions.

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10. STABILITY & REACTIVITY

Stability: Stable under normal conditions of use.

Hazardous Reactions Refer to SAFE HANDLING INFORMATION
Decomposition Products

11. TOXICOLOGICAL INFORMATION

The potential for SMF fibres to produce health effects has been the subject of extensive investigations over a number of decades. In 1997 the International Agency for Research on Cancer (IARC) reviewed the epidemiological and animal toxicology data on SMF (including ceramic fibre, glasswool, rockwool and slagwool) and classified the group as possible human carcinogens (IARC Group 2B). Since that time research has been conducted specific to Insulfrax. Additional information will be updated as studies are completed and reviewed. The following is a review of the results to date:

TOXICOLOGY: A number of studies have been made on the health effects of inhalation of fibres with similar chemistry and biopersistence to Insulfrax. A lifetime (6 hours per day, 5 days a week for 24 months) nose only inhalations study has been conducted in rats exposed to Maximum Tolerated Dose (30 mg/m³ , 200 fibres/ml). The findings indicate:

- no progressive lung damage (interstitial fibrosis) in the animals
- reversible cellular changes in the animal's lung tissue similar to the effects observed after inhalation of high concentrations of inert dust.
- No cancer of the lung or mesothelioma incidence over the control group.

The biopersistence of Insulfrax fibres tested under the European protocol for long fibres (.20 um) following inhalation produces a half-life of less than 10 days.

Fumed silica is amorphous (non-crystalline) and does not cause silicosis (pneumoconiosis).

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12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Waste shall be placed in containers, plastic bags or other methods which will prevent Fiber and/or dust emission and disposed of in accordance with the local waste disposal authority requirements. There may be specific regulations at the Local, State or Federal level that pertain to this material.

14. TRANSPORT INFORMATION

No special transport requirements are necessary.

UN Number	None Allocated
Shipping Name	None Allocated
DG Class	None Allocated
Packaging Group	None Allocated
Hazchem Code	None Allocated
Poisons Schedule	Not Scheduled

15. REGULATORY INFORMATION

Risk Statement: Irritating to eyes, respiratory system and skin.

Safety Statement: S22 Do not breathe dust. S52 Avoid contact with eyes.
S38 In insufficient ventilation, wear suitable respiratory equipment. Wear suitable protective clothing, gloves and eye/face protection.

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15. Regulatory Information cont'd:

Hazard Category: Harmful, irritant.

Poisons Schedule: Not scheduled.

16. OTHER INFORMATION

Contact: During Business Hours Ph: +61 3 9463 0000

Customer Service Toll Free: Ph: 1300 797 888

Emergency / After Hours Contact: Alan Smith

Ph: 0409 288 916

References: Replaces MSDS dated 27 March 2007.

NOTICE: *The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practise any patented invention without licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.*

.....End of Report.....

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