

Unifrax Australia Pty. Ltd.

326 Settlement Road  
Thomastown, VIC 3074

ACN 093 625 757

Ph: (03) 9463 7100 Fax: (03) 9464 5472



**INSULFRAX® VARIFORM**

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## MATERIAL SAFETY DATA SHEET

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

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### 1. IDENTIFICATION OF MATERIAL & SUPPLIER

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**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.

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### 2. HAZARDS IDENTIFICATION

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**Flammability**  
**Fire Hazards:** Non flammable

**Explosive Hazards:** Non explosive

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

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Authorised by: Alan Smith  
Version: 1.4  
Control Status: Controlled Document  
Created on: 01/05/10

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### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

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<b>Ingredients:</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	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%

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### 4. FIRST AID MEASURES

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<b>Ingestion:</b>	Ingestion is unlikely, but if it does occur DO NOT induce vomiting; drink plenty of water.
<b>Eye:</b>	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.
<b>Skin:</b>	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.
<b>Inhalation:</b>	Remove exposed person/s from source of exposure to fresh air. Recovery should be rapid, but if effects persist seek medical advice.
<b>ADVICE TO DOCTOR:</b>	Treat symptomatically for irritant effects see 'Other Information – Toxicology'.

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### 5. FIRE FIGHTING MEASURES.

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<b>Fire Explosion Hazard:</b>	Not Flammable and non explosive.
<b>Hazardous Reactions/ Decomposition Products</b>	Refer to SAFE HANDLING INFORMATION
<b>Hazchem Code:</b>	None Allocated.

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### 6. ACCIDENTAL RELEASE MEASURES

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<b>Spills or Release To the Environment</b>	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.
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### 7. HANDLING & STORAGE

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<b>Storage Precautions:</b>	Keep dry. No special storage requirements.
<b>Handling:</b>	<p>In the <b>installation</b> of Insulfrax Variform, the following handling and installation procedures are recommended:</p> <ul style="list-style-type: none"><li>a) All installation practices should be designed to minimise the liberation of any airborne fibre or dust.</li><li>b) In large installations of several days/weeks duration, the installation area should be clearly designated and barriers erected to limit access.</li><li>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.</li><li>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</li></ul>

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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.

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### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

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**Exposure Information:** 0.5 fibre/ml for SMF; 2mg/m<sup>3</sup> fumed silica (respirable dust); 10mg/m<sup>3</sup> 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.

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### 9. PHYSICAL & CHEMICAL PROPERTIES

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

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### 10. STABILITY & REACTIVITY

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**Stability:** Stable under normal conditions of use.

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

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### 11. TOXICOLOGICAL INFORMATION

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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/m<sup>3</sup> , 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

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Not available

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### 13. DISPOSAL CONSIDERATIONS

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**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.

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### 14. TRANSPORT INFORMATION

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No special transport requirements are necessary.

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

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### 15. REGULATORY INFORMATION

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**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.

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### 16. OTHER INFORMATION

**Contact:** During Business Hours Ph: +61 3 9463 7100

**Emergency / After Hours Contact:** Alan Smith  
Ph: 0409 288 916

**References:** Replaces MSDS dated 01 August 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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Version: 1.4  
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