
MATERIAL SAFETY DATA SHEET

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

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Brand Name:	Insulfrax®	
Ship Name (CSN):	N/A	
Name:	Insulfrax® Blok	
Other names:	Uniblock 110 Uniblock 110A Uniblock 110K Uniblock 110WT	
Synonyms:	Man-made mineral fibre (MMMMF)	
CAS No:	Not Allocated	
Recommended Uses:	Heat containment insulation	
UN Number	None Allocated	
DG Class	None Allocated	
Packaging Group	None Allocated	
Hazchem Code	None Allocated	
Poisons Schedule	Not Scheduled	
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 Information:	See page 9.	

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2. HAZARDS IDENTIFICATION

Classified as Non hazardous according to the criteria of NOHSC (National Occupational Health and Safety Commission).

Flammability

Fire Hazards: Non flammable

Explosive Hazards: Non explosive

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

Risk Phrases: See above (Health Hazards)

Safety Phrases: Do not breathe in dust. Wear suitable protective clothing.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Information on Composition: *Alkaline earth silicate containing SiO₂ (60-70%) and CaO + MgO (30-40%)

The biosoluble mineral fibres used in this product are not classified by the International Agency for Research on Cancer (IARC) as being carcinogenic.

Tests for the bio-resistance of the artificial mineral fibres used in the product showed a half-life in case of inhalation of less than 10 days and a half-life in case of intratracheal instillation of less than 40 days.

Note Q to the List of Designated Hazardous Substances by Worksafe Australia (NOHSC) states that classification as a carcinogen need not apply if it can be shown that the substance fulfils one of the following conditions:

- a short-term biopersistence test by inhalation has shown that the fibres longer than 0,00002 m have a weighted half life less than 10 days, or
- a short-term biopersistence test by intratracheal instillation has shown that the fibres longer than 0,00002 m have a weighted half life less than 40 days.

This product fulfils the requirements of Note Q to the List of Designated Hazardous Substances by Worksafe Australia enabling it to be classified as not carcinogenic.

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3. Composition & Information On Ingredients cont'd:

Ingredients:	Name	CAS	Proportion
	Synthetic Mineral Fibres*	436-083-99-7	94
	Organic Binder		5.5

4. FIRST AID MEASURES

- Respiratory Irritation:** If respiratory tract irritation develops, move the person to a dust free location, get them to drink water and blow their nose. Seek medical attention if the irritation continues. Refer to Section 8 for additional measures to reduce or eliminate exposure.
- Eye Irritation:** If eyes become irritated, flush immediately with large amounts of lukewarm water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Do not rub eyes. Seek medical attention if irritation persists.
- Skin Irritation:** If skin becomes irritated, remove soiled clothing. Do not rub or scratch exposed skin. Wash area of contact thoroughly with mild soap and water..
- Ingestion:** If gastrointestinal tract irritation develops, move the person to a dust free environment. Do not induce vomiting; drink plenty of water.
- Advice to doctor:** Skin and respiratory effects are the result of temporary, mild mechanical irritation. Treat symptomatically.
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5. FIRE FIGHTING MEASURES.

- Fire Explosion Hazard:** Not Flammable and not explosive.
- Hazardous Reactions/ Decomposition Products** Decomposition of this product may release trace gases, CO₂ and CO from organic/inorganic binders.
- Hazchem Code:** None Allocated.
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6. ACCIDENTAL RELEASE MEASURES

**Spills or Release
To the Environment**

Where possible, use vacuum suction to clean up spilled material. Use dust suppressant where sweeping is necessary. If vacuuming, the vacuum must be equipped with a HEPA filter. Avoid clean up procedures that may result in water pollution. Compressed air or dry sweeping should not be used for cleaning. Personal safety and exposure recommendations described elsewhere in this data sheet apply to exposure during clean up of spilled material.

7. HANDLING & STORAGE

Storage Precautions:

- a) Store the product in original container in a dry area – protect against moisture.
- b) Avoid damaging the original packing material
- c) Empty packaging may contain residue and should not be reused.

Handling:

- a) Avoid unnecessary handling of unwrapped product.
- b) Open packing just prior to use
- c) Dispose of scrap material and debris in suitable containers
- d) Frequently clean the work area with HEPA filtered vacuum or wet sweeping to minimise the accumulation of debris.
- e) Do not use compressed air for clean up
- f) Ensure good general ventilation
- g) Local exhaust ventilation may be required if the method of use produces dust levels in excess of the maximum exposure limits.

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8. EXPOSURE CONTROLS & PERSONAL PROTECTION

National Exposure Standards

No exposure standard has been established for this product by NOHSC, however National Exposure Standards for certain ingredients are shown below:

Ingredient	TWA Fibres/ml	TWA (mg/m ³)
Synthetic Mineral Fibre*	0.5	2 (inhalable dust)

Note: No exposure standard exists for biosoluble respirable fibres so the exposure standard of 0.5 fibres/ml for all forms of synthetic mineral fibres has been applied. For situations where almost all of the airborne material is fibrous, a secondary, yet complementary, Exposure Standard of 2 mg/m³ of inhalable dust is applicable to minimise upper respiratory tract irritation. This dust standard is not to take precedence over the respirable fibre standard of 0.5 fibres/ml.

Engineering Control Measures

Use engineering controls such as local exhaust ventilation, point of generation dust collection, down draft work stations, emission controlling tool designs, and materials handling equipment designed to minimize airborne dust emissions.

Exposure levels should be kept below NOHSC Guidelines, if this is not possible then more extensive precautions are required as outlined below in "Personal Protective Equipment".

Personal Protective Equipment

Respiratory protection: When engineering and/or administrative controls are insufficient to maintain workplace concentrations below the NOHSC TWA Exposure Standards, the use of appropriate respiratory protection, conforming to AS/NZS 1716 and 1715, is recommended. The evaluation of workplace hazards and the identification of appropriate respiratory protection is best performed, on a case by case basis, by a qualified Occupational Hygienist.

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8. Exposure Controls & Personal Protection cont'd:

Eye/Face protection: Wear goggles or safety glasses with side shields to prevent eye irritation. The use of contact lenses is not recommended, unless used in conjunction with appropriate eye protection. Do not touch eyes with soiled body parts or materials. If possible, have eye-washing facilities readily available where eye irritation can occur.

Skin protection: Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. If possible, do not take unwashed clothing home. If soiled work clothing must be taken home, employers should ensure employees are thoroughly trained on the best practices to minimize or avoid non-work dust exposure (e.g., vacuum clothes before leaving the work area, wash work clothing separately, rinse washer before washing other household clothes, etc.).

Additional Precautions for Thermally Stressed Materials

When the product has been exposed to temperatures greater than 900°C for sustained periods, the amorphous silicate in the mineral fibres begins to transform to mixtures of crystalline phases including cristobalite, a form of crystalline silica. The occurrence and extent of crystalline phase formation is dependent on the duration and temperature of exposure and the reaction occurs at the "hot face" of the product. The presence of cristobalite can be confirmed only through laboratory analysis.

The National Exposure Standard for cristobalite is 0.1 mg/m³ TWA (Interim). The International Agency for Research on Cancer (IARC) has classified crystalline silica inhaled in the form of quartz or cristobalite, as a Group 1 "Established human carcinogen".

For the removal of thermally stressed or embrittled product likely to contain cristobalite or if removal is being conducted in a poorly ventilated or enclosed space, the following Personal Protective Equipment is recommended:

Eye/Face protection: Wear goggles or safety glasses with side shields and head covering.

Skin protection: Wear disposable coveralls or long sleeve, loose fitting clothing and gloves. Clothing should be washed separately from other clothing to avoid cross-contamination.

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8. Exposure Controls & Personal Protection cont'd:

Respiratory protection: Wear a Class P2 half face respirator (conforming to AS/NZS 1716 and 1715). In some circumstances where excessive levels of dust are created, the limitations of filter loading capacity and facial seal may necessitate the use of:

- A full-face (Class P3) cartridge respirator; or
- A full-face (Class P3) powered air-purifying respirator; or
- A full-face, positive pressure, demand airline respirator

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White / Light Brown Board – No odour.
Melting Point	Not known.
Vapour Pressure	Not applicable
Density	0.22 – 0.95 g/cm ³
Flash Point	None
Solubility in Water	Insoluble in Water.
pH Value	Not applicable

10. STABILITY & REACTIVITY

Stability:	Stable under normal conditions of use.
Conditions To Avoid:	None
Incompatible Materials:	None
Hazardous Decomposition Products:	Thermal decomposition of organic binder occurs above 150°C. Emission may occur from fires or from first heating of product. Decomposition products are those typically expected from organic material including smoke, carbon monoxide, carbon dioxide and water. Use adequate ventilation or other precautions to eliminate exposure to vapours resulting from thermal decomposition of binder.

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10. Stability & Reactivity cont'd:

When the product has been exposed to temperatures greater than 900°C for sustained periods the amorphous silicate in the mineral fibres begins to transform to mixtures of crystalline phases including cristobalite, a form of crystalline silica. Refer to section 8 above for further information regarding thermally stressed materials.

11. TOXICOLOGICAL INFORMATION

Irritant Properties

Irritation to respiratory tract, skin and eyes may result from exposure to this product. Pre-existing skin conditions including dermatitis, asthma or chronic lung disease might be aggravated by exposure.

Tests for the bio-resistance of the artificial mineral fibres used in this product show the following results:

half-life in case of inhalation:	< 10 days
half-life in case of intratracheal instillation	< 40 days

12. ECOLOGICAL INFORMATION

The predominantly mineral components of this product are sluggish in reaction and environmentally stable. No ecological concerns with this product have been identified.

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.

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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

The biosoluble mineral fibres used in this product are not classified by the IARC as being carcinogenic.

This product fulfils the requirements of Note Q to the List of Designated Hazardous Substances by Worksafe Australia enabling it to be classified as not carcinogenic.

Poisons Schedule: Not scheduled.

16. OTHER INFORMATION

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

Emergency / After Hours Contact: Peter Willoughby
Ph: 0409 288 917

References: Replaces MSDS dated 19 March 2012.

Unifrax Australia Pty. Ltd.

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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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