
MATERIAL SAFETY DATA SHEET

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

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Brand Name:	Insulfrax
Other Names:	Asfilboard 110 Asfilboard 110M4 Asfilboard 110ZK Asfilboard 110WT
Synonyms:	Man-made mineral fibre (MMMF)
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:	Unifrax Germany Klienreinsdorf 62 D-07989 Teichwolframsdorf NUREMBERG GERMANY
Contact:	See page 10.

2. HAZARDS IDENTIFICATION

Flammability	
Fire Hazards:	Non flammable
Explosive Hazards:	Non explosive

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2. Hazards Identification cont'd:

Health Hazards: May cause temporary irritation to eyes, skin, respiratory system and disturbances to Gastro intestines.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product	Ingredient	CAS No	Proportion (wt %)
Asfilboard 110	Synthetic Mineral Fibres*	436-083-99-7	93
	Organic Binder		4.5
Asfilboard 110M4	Synthetic Mineral Fibres*	436-083-99-7	94
	Organic Binder		3.5
Asfilboard 110ZK	Synthetic Mineral Fibres*	436-083-99-7	93
	Organic Binder		5.5
Asfilboard 110WT	Synthetic Mineral Fibres*	436-083-99-7	94
	Organic Binder		3.5

*Synthetic mineral fibre containing SiO₂ (60-65%), CaO + MgO + Al₂O₃ (30-35%) and trace amounts of Na₂O + K₂O + Fe₂O₃.

Other Information:

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:

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3. Composition & Information on Ingredients cont'd:

- 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.

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:**
- Non-combustible product and does not pose a fire hazard.
 - Non Explosive.
 - Use extinguishing agent suitable for surrounding combustible materials.
- Hazardous Reactions/
Decomposition Products**
- Decomposition of this product may release trace gases, CO₂ and CO from organic/inorganic binders. Observe normal fire fighting procedures. No special measures are required to protect the product from fire and explosion.
- Hazchem Code:** None Allocated.

6. ACCIDENTAL RELEASE MEASURES

- Spills or Release
To the Environment**
- Collect or gather spilled product mechanically and transfer to appropriate container for disposal. Avoid the generation of dusts during cleanup. Dust suppressing cleaning methods such as wet sweeping or vacuuming should be used to clean the work area. If vacuuming, the vacuum must be equipped with a HEPA filter. Compressed air or dry sweeping should not be used for cleaning.
- Refer to personal protection and exposure controls section below during clean up of spilled product.
- Dispose of the product as waste according to section 13.

7. HANDLING & STORAGE

- Handling:**
- Avoid unnecessary handling of unwrapped product.
 - Open packing just prior to use

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7. Handling & Storage cont'd:

- Dispose of scrap material and debris in suitable containers
- Frequently clean the work area with HEPA filtered vacuum or wet sweeping to minimise the accumulation of debris.
- Do not use compressed air for clean up

- Ensure good general ventilation
- Local exhaust ventilation may be required if the method of use produces dust levels in excess of the maximum exposure limits.

Storage:

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

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 are 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.

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8. Exposure Controls & Personal Protection cont'd:

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 minimise 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 are best performed, on a case by case basis, by a qualified Occupational Hygienist.

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.).

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8. Exposure Controls & Personal Protection cont'd:

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.

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:

- (i) A full-face (Class P3) cartridge respirator; or
- (ii) A full-face (Class P3) powered air-purifying respirator; or

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8. Exposure Controls & Personal Protection cont'd:

- (iii) A full-face, positive pressure, demand airline respirator

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White / grey / brown board
Odour	None
Melting Point	Unknown
Flash Point	N/A
Vapour Pressure	N/A
Solubility in Water	Insoluble in water
Density	0.22 – 0.95 g/cm ³
pH Value	N/A

10. STABILITY & REACTIVITY

Stability: Stable under normal conditions of use.

**Hazardous Reactions
Decomposition** Thermal decomposition of organic binder occurs above 150oC. 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.

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.

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11. TOXICOLOGICAL INFORMATION

Not Available.

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 MANAGEMENT

To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended.

DISPOSAL

Waste should be placed in containers, plastic bags or other methods which prevent fibre 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

This product is not classified as dangerous good by the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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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.

Risk Phrases:

R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin

Safety Phrases:

S22	Do not breathe dust
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S38	In case of insufficient ventilation, wear suitable respiratory equipment

Hazard Category: Harmful, irritant.

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

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Literature References:

- National Occupational Health and Safety Commission, "Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003 (1995)]", in *Exposure Standards for Atmospheric Contaminants in the Occupational Environment: Guidance Note and National Exposure Standards*. AusInfo, Canberra.
- National Occupational Health and Safety Commission, *List of Designated Hazardous Substances* [NOHSC:10005 (1999)], AusInfo, Canberra, 1999.
- National Road Transport Commission and Federal Office of Road Safety, *Australian Code for the Transport of Dangerous Goods by Road and Rail*, 6th Edition, Australian Government Publishing Service, Canberra, 1998.

References: Replaces MSDS dated 19 March 2012.

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.*

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