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## MATERIAL SAFETY DATA SHEET

Classified as Non Hazardous according to criteria of Australian Safety and Compensation Council ASCC (formerly NOHSC), Approved Criteria for Classifying Hazardous Substances (NOHSC: 1008) 3<sup>rd</sup> Edition. Risk & Safety Phrases are not applicable to this product.

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### 1. IDENTIFICATION OF MATERIAL & SUPPLIER

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**Brand Name:** Asfilplan Millboard 85KB

**UN Number:** None Allocated

**DG Class** None Allocated

**Packaging Group** None Allocated

**Hazchem Code** None Allocated

**Poisons Schedule** Not Scheduled

**Product Use** Thermal Insulation at temperatures up to 1000 °C

**Supplier**

Unifrax GmbH  
Postfach 16 01 62  
D-40564 Düsseldorf  
**Germany**

Unifrax Australia Pty. Ltd.  
336 Settlement Rd  
Thomastown Victoria 3074  
**Australia**

Unifrax UK Limited  
Mill Lane, Rainford  
St. Helens, Merseyside  
**UK**

Unifrax France  
17 Rue Antoine durafour  
42420 Lorette, **France**

**Contact:** See page 9

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### 2. HAZARDS IDENTIFICATION

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**Flammability**

**Fire Hazards:** Non combustible. Packaging and surrounding materials may be combustible.

**Explosive Hazards:** Non explosive

**Health Hazards:** Possible Irritation to eyes, skin, nose and throat.

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### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS</u>	<u>Symbol</u>	<u>R Phrases</u>
Mineral Wool	287922-11-6	None	None

**Composition:**

**Mineral Wool contains:**

23-26% CaO-MgO, 18-23% Al<sub>2</sub>O<sub>3</sub> 38-43% SiO<sub>2</sub>

**Other Information:** Mineral wool products are available in the form of: boards and shapes. According to product form, other ingredients may be present:

<b>PRODUCTS</b>	<b>Significant Ingredients</b>	<b>Hazard warning</b>	<b>Risk Phrase</b>
Asfilplan 85KB	Starch Binder (6%)	None	None
	Clay filler (<80%)		
	Cellulose		

### 4. FIRST AID MEASURES

- Swallowed:** Rinse lips and mouth with water, give water to drink and seek medical attention.
- Eye:** Flush immediately with large amounts of water for at least 15 minutes. 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. Drink water and blow nose.

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### 4. First Aid Measures cont'd:

**ADVICE TO DOCTOR:** This product can be slightly irritant to the skin, but is not known to produce any chronic health effects. Treatment should be directed toward the source of irritation with symptomatic treatment as necessary. Any other symptoms and signs of ill health are likely to be due to other causes.

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### 5. FIRE FIGHTING MEASURES.

**Fire Explosion Hazard:** Non combustible product. Packaging and surrounding materials may be combustible. Use extinguishing agent suitable for surrounding combustible materials.

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

**Hazchem Code:** None Allocated.

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### 6. ACCIDENTAL RELEASE MEASURES

**Spills or Release  
To the Environment** If product is damaged, reseal and minimise fibre release. Personnel directly involved in clean up should wear protective equipment as described in Section 8 to prevent skin and eye irritation. Clean area so as to avoid dispersion of any irritant fibres using wet sweep methods or approved micro-filter equipped vacuum cleaner. Re-use where possible or place in a sealable plastic bag for disposal according to local authority guidelines.

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### 7. HANDLING & STORAGE

**Handling:** Handling, installing or removing the product may result in some dust and airborne fibre; minimise eye or skin contact and inhalation during handling, installation and removal. Observe good personal hygiene, including washing hands before eating. Remove protective equipment before entering eating areas.

**Storage:** Store in sealed container in cool, dry area, removed from foodstuffs. Ensure packages are adequately labeled, protected from physical damage and sealed when not in use. Avoid packaging being stored under UV light (direct sunlight) for long periods.

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### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

**Exposure:** Australian Safety and Compensation Commission (ASCC) standards provide that all exposures should be kept as low as practicable. Airborne respirable fibre levels will very rarely exceed 0.5 f/ml in user applications. During most applications and installations of this product, no special ventilation will be required, however, if dusty or in confined spaces, local exhaust ventilation should be considered. Work practices should aim to minimise the release of and exposure to fibres and/or dust. Hand tools that generate the least amount of dust and fibres are recommended. If power tools are used directly on the product appropriate dust collection systems are recommended. Work areas should be cleaned regularly and vacuuming or wet sweeping is recommended.

#### Personal Protection

**Eye Protection** Safety glasses with side shields, or chemical goggles must be worn when handling this material. Wear safety glasses or chemical goggles to prevent eye contact. Contact lenses

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### 8. Exposure Controls & Personal Protection cont'd:

should not be worn unless chemical goggles are also worn and care is taken not to touch the eye with contaminated parts of the body. Have eye-washing facilities readily available where eye contact can occur.

#### Clothing

Wear gloves, hats or full body clothing to prevent contact to skin as necessary. Use separate lockers for work clothes to prevent fibre transfer to street clothes. Avoid taking unwashed work clothes home or provide disposable work clothing. Wash work clothes separately from other clothing. Rinse washing machine thoroughly after use. If clothing is to be laundered by someone else, inform launderer of proper procedure.

#### Protective Equipment

The National Code of Practice for the Safe Use of Synthetic Mineral Fibres (NOHSC May 1990) advises that for installation and removal of both bonded and unbonded ceramic fibre material the following personal protective equipment should be used:

- (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 respirator (Class P1 or P2) respirator should be worn during work in enclosed or poorly ventilated spaces, for example, in ceiling spaces, or where evidence suggests that respirable fibre levels may exceed 0.5 f/ml.

For ceramic fibre removal work the following personal protective equipment should be used.

- (a) Disposable coveralls or long sleeves, loose fitting clothing and gloves be worn during installation (launderable clothing should be washed separately from other clothing)

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### 8. Exposure Controls & Personal Protection cont'd:

- (b) Where overhead work is involved, goggles and head covering should be worn; and
- (c) A half-face respirator (Class P1 or P2) respirator.

For removal of embrittled or heat effected ceramic materials, the following personal protective equipment should be used by all personnel directly involved in the removal work.

- (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 or suitable eye protection and head covering should be worn.
- (c) A Class P2 respirator provides the necessary protection factor for this task. However, 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 (P3) cartridge respirator, or
  - a full (P3) powered air-purifying respirator or
  - a full faced, positive pressure demand airline respirator.

All respiratory protective devices should comply with AS/NZS1715 and AS/NZS1716.

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### 9. PHYSICAL & CHEMICAL PROPERTIES

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<b>Appearance:</b>	Grey-green	<b>pH:</b>	NA
<b>Physical State</b>	Solid	<b>Explosive Properties:</b>	None
<b>Melting Point:</b>	>1000°C	<b>Odour:</b>	None
<b>Flammability:</b>	None	<b>Oxidising Properties:</b>	None
<b>Fibre Diam. (Numerical Average)</b>	5.5um		

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### 10. STABILITY & REACTIVITY

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**Chemical Stability:** No reported incompatibilities, however, resin binders may be attacked by acidic, alkaline or solvent based substances. The cured resin is stable and will remain intact for the life of the product under normal atmospheric conditions.

**Hazardous Reactions** Non known.  
**Decomposition Products**

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### 11. TOXICOLOGICAL INFORMATION

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There are no known long term health effects. Mineral wool insulation fibres have been tested in laboratory studies according to EC protocols ECB/TM26:27REV.7 1998 and shown to be bio-soluble. Bio-soluble means that any fibres inhaled into the lungs dissolve in body fluids and are then cleared from the lungs. Fibres would comply with the short term bio-persistence test and fulfill the requirements of Australian and International authorities on bio-solubility. ASCC/NOHSC and international authorities do not classify mineral wool fibres with high bio-solubility as carcinogenic.

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### 12. ECOLOGICAL INFORMATION

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These products are inert materials, which remain stable overtime.  
No adverse affects of this material on the environment are anticipated.

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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

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### 13. Disposal Considerations cont'd:

level that pertain to this material. Use protective equipment as described in Section 8 when handling uncontained material.

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### 14. TRANSPORT INFORMATION

Not classified as dangerous goods.  
Ensure that dust is not wind-blown during transportation.

UN Number:	None Allocated
Class:	None Allocated
Subsidiary Risk:	None Allocated
Packaging Group:	None Allocated
Hazchem Code:	None Allocated

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### 15. REGULATORY INFORMATION

**Classification:** Classified as Non Hazardous according to ASCC/NOHSC criteria.  
Classified as Non Dangerous Goods according to criteria of the Australian Dangerous Goods Code.

**Poisons Schedule:** None allocated.

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### 16. OTHER INFORMATION

#### **RCF DEVITRIFICATION**

As produced, all RCG fibers are vitreous (glassy) materials which do not contain crystalline silica. Continued exposure to elevated temperatures may cause these fibers to devitrify (become crystalline). The first crystalline formation (mullite) begins to occur at approximately 985° C (1805° F). Crystalline phase silica may begin to form at temperatures of approximately 1200° C (2192° F). The occurrence and extent of crystalline phase formation is dependent on the duration and temperature of exposure,



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### 16. Other information cont'd:

fiber chemistry and/or the presence of fluxing agents. The presence of crystalline phases can be confirmed only through laboratory analysis of the "hot face" fiber. IARC's evaluation of crystalline silica states "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)" and additionally notes "carcinogenicity in humans was not detected in all industrial circumstances studied" (IARC Monograph Vol. 68, 1997). NTP lists all polymorphs of crystalline silica amongst substances which may "reasonably be anticipated to be carcinogens".

IARC and NTP did not evaluate after-service RCF, which may contain various crystalline phases. However, an analysis of after-service RCF samples obtained pursuant to an exposure monitoring agreement with the USEPA, found that in the furnace conditions sampled, most did not contain detectable levels of crystalline silica. Other relevant RCF studies found that (1) simulated after-service RCF showed little, or no, activity where exposure was by inhalation or by intra-peritoneal injection; and (2) after-service RCF was not cytotoxic to macrophage-like cells at concentrations up to 320 g/cm<sup>2</sup> - by comparison, pure quartz or cristobalite were significantly active at much lower levels (circa 20 g/cm<sup>2</sup>).

### CONTACT DETAILS:

**Contact:**

During Business Hours

Ph: +61 3 9463 7100

**Emergency / After Hours Contact:**

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**ASFILPLAN 85KB**

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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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