1 Identification

Product Name: CERAMIC FIBRE BLANKET

Other Means of Identification:
Other Name: Fibrefrax, Kaowool, Cerakwool

Recommended Use of the Chemical and Restriction on Use:
High temperature thermal insulation of process plant and equipment (operating at temperatures up to 1260°C)

Details of Manufacturer or Importer:
FM Insulation Supplies
19-21 Bromley Road
Emu Plains NSW 2750

Phone Number: 02 4735 5699

Emergency telephone number: 0417 230030

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Carcinogenicity 1B H350i May cause cancer by inhalation.

Signal Word Danger

Hazard Statements
H350i May cause cancer by inhalation.

Precautionary Statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterisation: Substances
CAS No. Description
142844-00-6 Refractory ceramic fibre 100%
Length weighted geometric mean diameter typically around 1.4 - 3 µm.

Additional information:
Refractory Ceramic Fibre (RCF) is a high temperature performance type of Synthetic Mineral Fibre (SMF).
Refractory Ceramic Fibres are used primarily in industry as insulation for high-temperature applications such as furnaces, boilers and other heating equipment.

4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.
Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Do not rub or scratch exposed skin. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Do not rub eyes. Seek medical attention if symptoms occur.

Ingestion:
If swallowed, do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: Dust may cause irritation or soreness of throat and nose.
Skin Contact: Dust may cause temporary dryness, irritation or rash.
Eye Contact: Dust may cause temporary irritation or inflammation.
Ingestion: Ingestion is unlikely. May cause gastrointestinal disturbances.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:
This product is non flammable and will not burn or decompose in a fire.
Product close to fire should be removed only if safe to do so.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear approved respiratory protective equipment against excessive concentrations of respirable and fibrous dust or other possible contaminants, protective gloves and loose fitting overalls and safety glasses with top and side shields or goggles. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid dust generation and collection.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Pick up large pieces, sweep and place into a sealable container to prevent waste material from becoming airborne or remove dust by using a vacuum cleaner fitted with high efficiency filter (HEPA). Wet down area to minimise dust generation. Never use compressed air to collect fibres as smallest particles remain airborne.

7 Handling and Storage

Precautions for Safe Handling:
Continuous use of silica at temperatures above 900 °C may lead to the formation of several crystalline phases.
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Maintain a good standard of cleanliness. Avoid formation and collection of dust. Work areas must be regularly cleaned of off-cuts and loose fibres, which should be sealed in plastic disposal bags or other sealable containers. When cutting is required it should be done with hand tools fitted with local exhaust extraction. The exhaust from such extraction equipment should be fitted and positioned away from work areas.
All installation practices should be designed to minimise the liberation of any airborne fibre or dust. The installation area should be clearly designated and barriers erected to limit access. The ceramic 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.
Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**
Store in original packaging in a cool, dry and well ventilated area. Avoid damaging the packaging. Do not leave outside where the fibre may be open to the wind and become airborne. Minimise airborne dusts by avoiding the unnecessary disturbance of product.

## 8 Exposure Controls and Personal Protection

<table>
<thead>
<tr>
<th>Exposure Standards:</th>
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<tbody>
<tr>
<td>Refractory Ceramic Fibres</td>
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<tr>
<td>WES TWA: 0.5 f/mL (respirable)</td>
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<tr>
<td>TWA: 2 mg/m³ (inhaled dust)</td>
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</table>

**Engineering Controls:**
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

**Respiratory Protection:**
Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**
Leather/pigskin, neoprene or nitrile gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting hand protection, the product should comply with relevant performance criteria. For example, gloves should meet a suitable level of abrasion resistance to provide protection against hazards of a workplace.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**
Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance:</th>
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<tbody>
<tr>
<td>Form: Fibrous mat/blanket</td>
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<tr>
<td>Colour: White</td>
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<tr>
<td>Odour: Odourless</td>
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<tr>
<td>Odour Threshold: Not determined.</td>
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<tr>
<td>pH-Value: Not applicable.</td>
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<tr>
<td>Melting point/freezing point: &gt;1650 °C</td>
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<tr>
<td>Initial Boiling Point/Boiling Range: Not applicable</td>
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<tr>
<td>Flash Point: Not applicable</td>
</tr>
<tr>
<td>Flammability: Non flammable</td>
</tr>
<tr>
<td>Auto-ignition Temperature: No information available</td>
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<tr>
<td>Decomposition Temperature: No information available</td>
</tr>
<tr>
<td>Explosion Limits: Lower: Not applicable</td>
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</table>

(Contd. on page 4)
Safety Data Sheet
according to WHS Regulations

Product Name: CERAMIC FIBRE BLANKET

Upper: Not applicable
Vapour Pressure: Not applicable.
Density: No information available
Vapour Density: Not applicable.
Evaporation Rate: Not applicable
Solubility in Water: <1 mg/l
Partition Coefficient (n-octanol/water): Not applicable
Viscosity: Not applicable

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.
Chemical Stability: Stable at ambient temperature and under normal conditions of use.
Conditions to Avoid: No further relevant information available.
Incompatible Materials: No further relevant information available.
Hazardous Decomposition Products:
Continuous use of silica at temperatures above 900 °C may lead to the formation of several crystalline phases.

11 Toxicological Information

Toxicity:
LD₅₀/LC₅₀ Values Relevant for Classification: No information available

Acute Health Effects
Inhalation: Dust may cause irritation or soreness of throat and nose.
Skin: Dust may cause temporary dryness, irritation or rash.
Eye: Dust may cause temporary irritation or inflammation.
Ingestion: Ingestion is unlikely. May cause gastrointestinal disturbances.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.
Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.
Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.
Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.
Carcinogenicity:
Refractory ceramic fibre is classified by IARC as Group 2B - Possibly carcinogenic to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available
Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information: No information available
12 Ecological Information

Ecotoxicity: No adverse ecological effects are expected.

Aquatic toxicity: No further relevant information available.

Persistence and Degradability: This product is inert.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: This product will rapidly settle from water and is not expected to be mobile.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated
Proper Shipping Name Not regulated
Dangerous Goods Class Not regulated
Packing Group: Not regulated

15 Regulatory Information

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule: Not Scheduled.

16 Other Information

Date of Preparation or Last Revision: 30.04.2019
Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC₅₀: Lethal concentration, 50 percent
LD₅₀: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Carcinogenicity 1B: Carcinogenicity – Category 1B

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”
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