

1 Identification

Product Name: CALCIUM-SILICATE-MAGNESIA FIBRE

Recommended Use of the Chemical and Restriction on Use:

High temperature thermal insulation of process plant and equipment.

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 230 030

2 Hazard(s) Identification

Hazardous Nature:

Not 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)

The product is not classified, according to the Globally Harmonised System (GHS).

Signal Word None

Hazard Statements None

Precautionary Statements None

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 7631-86-9	Silica	48%
CAS: 1309-48-4	Magnesium oxide	48%
CAS: 1344-28-1	Aluminium oxide (Al ₂ O ₃)	1%
CAS: 1309-37-1	Iron oxide	0.5%
CAS: 1313-59-3	Sodium oxide ⚠ Skin Corrosion/Irritation 1B, H314	0.5%
CAS: 1305-78-8	Calcium oxide ⚠ Serious Eye Damage/Irritation 1, H318; ⚠ Skin Corrosion/Irritation 2, H315; STOT SE 3, H335	0.5%
CAS: 12136-45-7	Dipotassium oxide ⚠ Skin Corrosion/Irritation 1B, H314	0.25%

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. Seek medical attention if symptoms occur.

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Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

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. Packaging may be combustible. 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:

Spill area should be wet down with water to reduce dust generation before cleanup. A surfactant may be added to the water to improve wetting process. 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). Never use compressed air to collect fibres as smallest particles remain airborne.

7 Handling and Storage

Precautions for Safe Handling:

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. 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. Minimize airborne dusts by avoiding the unnecessary disturbance of product. Keep away from strong mineral acids.

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8 Exposure Controls and Personal Protection

Exposure Standards:	
CAS: 7631-86-9 Silica	
WES	TWA: 2 mg/m ³
CAS: 1309-48-4 Magnesium oxide	
WES	TWA: 10 mg/m ³
CAS: 1344-28-1 Aluminium oxide (Al₂O₃)	
WES	TWA: 10 mg/m ³
CAS: 1309-37-1 Iron oxide	
WES	TWA: 5 mg/m ³
CAS: 1305-78-8 Calcium oxide	
WES	TWA: 2 mg/m ³

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of dust 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

Appearance:

Form:	Fibrous mat/blanket
Colour:	White
Odour:	Odourless
Odour Threshold:	Not determined.
pH-Value:	Not applicable.
Melting point/freezing point:	>1250 °C
Initial Boiling Point/Boiling Range:	Not applicable
Flash Point:	Not applicable
Flammability:	Non flammable
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable

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Upper:	Not applicable
Vapour Pressure:	Not applicable.
Density:	No information available
Vapour Density:	Not applicable.
Evaporation Rate:	Not applicable
Solubility in Water at 20 °C:	0.1 g/l
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

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: Strong mineral acids.

Hazardous Decomposition Products:

Continuous use of silica at temperatures above 900 °C may lead to the formation of several crystalline phases. Chronic exposure to respirable crystalline silica may cause delayed lung injury (silicosis) and cancer. Silica dust, crystalline, in the form of quartz or cristobalite is classified by IARC as a Group 1 - Carcinogenic to humans.

11 Toxicological Information

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

CAS: 7631-86-9 Silica

Oral	LD ₅₀	10,000 mg/kg (rat)
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CAS: 1344-28-1 Aluminium oxide (Al₂O₃)

Oral	LD ₅₀	>80 mg/kg (rat)
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CAS: 1309-37-1 Iron oxide

Oral	LD ₅₀	>15,000 mg/kg (rat)
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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: No sensitising effects known.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:

Silica, amorphous and ferric oxide are classified by IARC as Group 3 - Not classifiable as to its carcinogenicity 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.

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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 further relevant information available.**Aquatic toxicity:** No further relevant information available.**Persistence and Degradability:** No further relevant information available.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** No further relevant information available.**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****Australian Inventory of Chemical Substances:**

CAS: 7631-86-9	Silica
CAS: 1344-28-1	Aluminium oxide (Al ₂ O ₃)
CAS: 1309-37-1	Iron oxide
CAS: 1313-59-3	Sodium oxide
CAS: 1305-78-8	Calcium oxide
CAS: 1309-48-4	Magnesium oxide
CAS: 12136-45-7	Dipotassium oxide

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Not Scheduled.

16 Other Information**Date of Preparation or Last Revision:** 10.09.2018**Prepared by:** MSDS.COM.AU Pty Ltd

www.msds.com.au

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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 percentLD₅₀: 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)

Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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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