



UNIFRAX FYREWRAP DUCT INSULATION

Chemwatch GHS Safety Data Sheet
Issue Date: 25-Jun-2013
C554SP

CHEMWATCH 4871-73
Version No:3.1.1.1
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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

UNIFRAX FYREWRAP DUCT INSULATION

OTHER NAMES

"FYREWRAP Elite 1.5 Duct Insulation; FYREWRAP 1.5 Duct Insulation; FYREWRAP EZ 1.5 Duct Insulation; FYREWRAP Max 2.0 Duct Insulation, Synthetic vitreous fibre (SVF), man-made vitreous fibre (MMVF), man-made mineral fibre (MMMMF)"

PRODUCT USE

Thermal insulation material.

SUPPLIER

Company: Unifrax Australia Pty Ltd
Address:
336 Settlement Rd
Thomastown
VIC 3074
Australia
Emergency Tel: 0409 288 917 Mon- Fri 9am- 5pm
Emergency Tel: Peter Willoughby, Managing Director

Section 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not hazardous

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
alkaline earth silicate wool (biosoluble)	436083-99-7	96-100
The encapsulated product additionally contains aluminium foil with fibreglass reinforcement and inorganic adhesive		2-4

Section 4 - FIRST AID MEASURES

SWALLOWED

- Not considered a normal route of entry.
- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

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Section 4 - FIRST AID MEASURES

EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- Gently brush or vacuum off adherent fibres.
- Wash affected areas thoroughly with water (and soap if available).
- Seek medical attention if irritation exists and persists.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear breathing passages.
- Ask patient to rinse mouth with water but to not drink water.
- Seek immediate medical attention.

NOTES TO PHYSICIAN

- Treat symptomatically.
- Mineral fibres are a mechanical irritant, and are not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary. Lung function should be monitored, periodically, in individuals chronically exposed to fibres in an occupational setting.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD

- Non combustible.
 - Not considered a significant fire risk, however containers may burn.
- The packaging, facings and resin may smoulder, decompose or burn. Depending upon the facing, decomposition may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO₂), phenols, formaldehyde and other toxic gases.

FIRE INCOMPATIBILITY

- None known.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Wear protective clothing, gloves, safety glasses and dust respirator.
- Clean up all spills immediately.
- Secure load if safe to do so.
- Bundle/collect recoverable product.
- Collect remaining material in containers with covers for disposal.

MAJOR SPILLS

- Wear protective clothing, gloves, safety glasses and dust respirator.
- Clean up all spills immediately.
- Secure load if safe to do so.
- Bundle/collect recoverable product.

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Section 6 - ACCIDENTAL RELEASE MEASURES

- Collect remaining material in containers with covers for disposal.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.

SUITABLE CONTAINER

Carton.

STORAGE INCOMPATIBILITY

- No known incompatibility with normal range of industrial materials.

STORAGE REQUIREMENTS

- Keep dry.
- Store under cover.
- Protect containers against physical damage.
- Observe manufacturer's storage and handling recommendations contained within this MSDS.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- alkaline earth silicate wool (biosoluble):

CAS:436083- 99- 7

MATERIAL DATA

ALKALINE EARTH SILICATE WOOL (BIOSOLUBLE):

UNIFRAX FYREWRAPI DUCT INSULATION:

- for biosoluble fibres and dusts

ES TWA: 0.5 fibre/ml (for respirable fibres); 2.0 mg/m³ (inspirable dusts)

Biosoluble vitreous fibres do not generally have separate Occupational Exposures Standards (OELs). But for airborne respirable particles and inspirable dusts different exposure standards are suggested.<</>.

ALKALINE EARTH SILICATE WOOL (BIOSOLUBLE):

- The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 µm (+-) 0.3 µm and with a geometric standard deviation of 1.5 µm (+-) 0.1 µm, i.e. generally less than 5 µm.

Synthetic vitreous fibres are composed largely of aluminium and calcium silicates derived from rock, clay, slag or glass. For the purpose of classification they are divided into two broad classes: filaments and wools.

PERSONAL PROTECTION

RESPIRATOR

- Particulate dust filter. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HANDS/FEET

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.

OTHER

- Disposable coveralls or long sleeve, loose fitting protective clothing, e.g. overalls (launder clothing separately from other clothing).
- When working above head height, use head covering.
- Minimise dust generation by using sharp hand cutting tools if possible.
- Powered tools (e.g. saws etc.) should only be used if fitted with dust extraction and containment equipment.
- Personnel involved in the installation of unbonded ceramic materials should wear disposable coveralls, or long-sleeve loose fitting clothing, gloves and suitable respirator. Such equipment should also be used by personnel employed in removing materials which have not become embrittled.
- Personnel involved in the removal of embrittled material should in addition, use a full-face cartridge respirator, or full-face powered air purifying respirator, each with suitable particulate filter, or a full-face pressure demand airline respirator.

ENGINEERING CONTROLS

- Use in a well-ventilated area.

If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.

- If measured respirable fibre is less than the recommended occupational exposure level, wear approved dust respirator Class P1 (half-face).
- Use a Class P2 or P3 respirator (full-face), where exposure is above the recommended occupational exposure level
- Use an approved respirator if power tools without dust extraction or containment are used.
- Provide good ventilation (either forced or natural)
- Where possible, enclose sources of dust and provide dust extraction at the source.
- Restrict access to work areas involved in handling man-made mineral fibres and ensure that adequate training, in the handling of such materials, has been provided.
- Use operating procedures which limit the generation of dusts.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

White, odourless fibrous material; insoluble in water.

PHYSICAL PROPERTIES

Does not mix with water.

Sinks in water.

State	Manufactured	Molecular Weight	Not applicable.
Melting Range (°C)	1260	Viscosity	Not Applicable
Boiling Range (°C)	Not applicable.	Solubility in water (g/L)	Immiscible
Flash Point (°C)	Not applicable	pH (1% solution)	Not applicable
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not applicable
Autoignition Temp (°C)	Not available	Vapour Pressure (kPa)	Not applicable.
Upper Explosive Limit (%)	Not applicable	Specific Gravity (water=1)	2.60
Lower Explosive Limit (%)	Not applicable	Relative Vapour Density (air=1)	Not applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not applicable

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Product is considered stable and hazardous polymerisation will not occur.
For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

Health hazard summary table:

Acute toxicity	Not applicable
Skin corrosion/irritation	Not applicable
Serious eye damage/irritation	Not applicable
Respiratory or skin sensitization	Not applicable
Germ cell mutagenicity	Not applicable

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Section 11 - TOXICOLOGICAL INFORMATION

Carcinogenicity	Not applicable
Reproductive toxicity	Not applicable
STOT- single exposure	Not applicable
STOT- repeated exposure	Not applicable
Aspiration hazard	Not applicable

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

- Not normally a hazard due to the physical form of product. The material is a physical irritant to the gastro-intestinal tract.

EYE

- There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

SKIN

- Man-made mineral fibres may produce mild skin reaction with itching or redness of the skin. This is due to the physical and not from the chemical nature of the substance.
- The material may accentuate any pre-existing skin condition.

INHALED

- The dust may produce upper respiratory tract discomfort. Nose and throat discomfort may be transitory.

CHRONIC HEALTH EFFECTS

- Insulation wools belong to the generic group of man-made vitreous fibres (MMVF), also known as man-made mineral fibres (MMMF) or synthetic mineral fibres (SMF). The insulation wools are significantly different from other types of MMVF. The size and chemical properties of the fibres are different. Insulation wools have a high oxide content, which makes them more soluble than most other MMVFs in the bodily fluids of the lung. This reduces their length of persistence in the lung and their potential to cause cancer. The length of time which a fibre stays within tissue is a main indicator of the potential of the fibre to cause damage. This length is dependent upon solubility, leaching and clearance. Large fibres generally persist longer than small ones (glass fibres, though longer, are cleared more quickly). Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity, chest infections. Repeated exposures, in an occupational setting, to high levels of fine- divided dusts may produce a condition known as pneumoconiosis which is the lodgement of any inhaled dusts in the lung irrespective of the effect.

TOXICITY AND IRRITATION

- Not available. Refer to individual constituents.

Section 12 - ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
alkaline earth silicate wool (biosoluble)	No Data Available	No Data Available	No Data Available	No Data Available

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

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Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE None

REGULATIONS

Regulations for ingredients

No data for Unifrax Fyrewrap Duct Insulation (CW: 4871-73)

No data for Unifrax Fyrewrap Duct Insulation (CAS: , 436083-99-7)

Section 16 - OTHER INFORMATION

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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