MATERIAL SAFETY DATA SHEET

Glass Mineral Wool with ECOSE® Technology

Non-Hazardous Substance **Non-Dangerous Goods**

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Glass Mineral Wool with ECOSE Technology
Other Names:	Earthwool® glasswool, Space Blanket®, Supafil®, Jet Stream® MAX
Recommended Use:	Thermal and acoustic insulation, and energy conservation. Used in homes, public and commercial buildings, warehouses, industrial and petrochemical plants, motor vehicles, ships, public transport, power stations and white goods.
Supplier:	Knauf Insulation Pty Ltd
Address:	Building 1, Unit 2, 15 Accent Drive, East Tamaki 2013, Auckland
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Email address:	tech.nz@knaufinsulation.com
Website:	www.knaufinsulation.co.nz
Emergency contact:	000 Fire Brigade and Police or 13 11 26 Poisons Information Centre

As Glass Mineral Wool with ECOSE Technology products by Knauf Insulation are classified as **NON-HAZARDOUS**, a Material Safety Data Sheet (MSDS) is not strictly required under Australian Regulations. This MSDS is issued by Knauf Insulation for the information of users, installers and the community. It has been formatted in accordance with the Code on Preparation of a Material Safety Data Sheet 2003 Safe Work Australia (SWA – formerly ASCC/NOHSC).
The information in this MSDS must not be altered, deleted or added to. Knauf Insulation will not accept any responsibility for any changes made to its MSDS by any other person or organisation. Knauf Insulation will issue a new MSDS when there is a change in product specifications and/or ASCC standards, codes, guidelines, or regulations.

SECTION 2: HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE: Classified as **Non-Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC: 1008] 3rd Edition. Glass Mineral Wool with ECOSE Technology is classified as **Non-Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Proportion:	CAS Number:
Mineral glasswool fibre (amorphous, non-crystalline, bio-soluble – Note Q applicable)	87-100%	65997-17-3
Thermo set, inert polymer bonding agent derived from plant starches (without added formaldehyde)	0-13%	-

Notes:

1. Mineral wool man (machine) made vitreous fibre (mmvf), alkali and alkaline earth (CaO + MgO + NaO + K2O) > 18 % in weight meeting the requirements of Note Q of directive 97/69/EEC and Classification, Labelling and Packaging (CLP), 1272/2008.
2. CAS-No.: Chemical Abstract Service
3. Glass mineral wool insulation fibres are not classified carcinogenic according to regulation n° 1272/2008 (page 335 of the JOCE L353 of December 31, 2008).
4. Possible facing materials: glass veil, or polyester mat or aluminium or Kraft paper.

SECTION 4: FIRST AID MEASURES

Swallowed:	Rinse lips and mouth with water. Drink plenty of water if accidently ingested. Emergency procedures not normally required. May be a temporary irritant to the GI system.
Eye:	Rinse abundantly with clean water until irritation subsides or for at least 15 minutes. If discomfort persists, seek medical attention.
Skin:	Normal good personal hygiene practices. Wash with mild soap and water after each exposure. If mechanical irritation occurs, remove contaminated clothing and wash skin gently with water and soap. If itch or discomfort persists, seek medical attention.
Inhaled:	Remove to fresh air. Rinse the throat and blow nose to clear dust. If symptoms persist, seek medical attention.
Advice to Doctor:	Any symptoms and signs of ill-health are likely to be due to other causes. Can be slightly itchy on prolonged contact with skin. Does not produce any acute or chronic health effects. Treatment should be directed toward cleansing the skin and symptomatic treatment as necessary.

SECTION 5: FIRE FIGHTING MEASURES	
Flammability:	Non-flammable, will not burn.
Suitable Extinguishing Media:	As needed for surrounding fire conditions. Any extinguishing media may be used as required. Waterfog may be used to cool intact containers and nearby storage areas.
Hazards from combustion products:	Glass Mineral Wool with ECOSE® Technology is non-combustible in line with AS1530.1:1999, but the plastic wrapping, binder and some facings may decompose, smoulder or burn in a fire or when heated above 300ºC. If product is present in a fire, toxic gases or smoke may be evolved depending on surrounding fire conditions. Glass Mineral Wool with ECOSE Technology has a 4 zero fire rating when subjected to early fire hazard tests in accordance with the Australian Standard - AS1530.3:1999
Fire Fighting Procedures:	As needed for surrounding fire conditions. If required, evacuate area and contact emergency services; remain upwind and notify those downwind of fire hazard; and wear protective equipment including Self-Contained Breathing Apparatus (SCBA).
HAZCHEM Code:	None allocated.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Containment Procedure:	If product is torn or loose, cover or reseal to minimise fibre release. Reuse where possible or place in a sealable plastic bag for disposal according to local authority guidelines.
Clean Up Procedure:	Personnel directly involved in clean-up of loose material should wear personal protective equipment as described in Section 8. Clean area so as to avoid dispersion of loose material or fibres using wet sweep methods or micro-filter vacuum cleaner.

SECTION 7: HANDLING & STORAGE	
Handling:	These products are safe in use. Once installed, Glass Mineral Wool with ECOSE Technology does not release dust or fibres. 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 (see Section 8). Observe good personal hygiene, including washing hands before eating.
Storage:	Glass Mineral Wool with ECOSE Technology must be stored under cover and in dry conditions. Heavy objects must not be stacked on the packs. The packs must be stored in an orientation that avoids excessive compression of the product. Compression packaged glasswool is subjected to a maximum combination of compression density and storage time after which the product may not loft to its nominal thickness and therefore may not achieve its designed thermal performance.
Incompatibilities:	None

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION	
Exposure Standards:	National Occupational Exposure Standard (NES) Australian Safety and Compensation Council, ASCC (formerly NOHSC): None allocated for Glass Mineral Wool with ECOSE® Technology products, which may be regarded as nuisance dusts. Knauf Insulation recommends following the National Occupational Exposure Standard (NES) Australian Safety and Compensation Council, ASCC (formerly NOHSC) general guide to keep all occupational exposures to dust and other atmospheric contaminants to as low a level as is workable (practicable). For non-hazardous nuisance dusts: 2.0 mg/m³ TWA for inspirable dusts and/or 10 mg/m³ TWA (time-weighted average) for total dust (of any type, or particle size) is recommended.
Engineering Controls, Ventilation:	During most applications and installation no special ventilation will be required. However, if installing in dusty or poorly-ventilated areas, or during the first heat-up cycle in high- temperature applications, local exhaust ventilation should be considered. Work practices should aim to minimise the release of, and exposure to, fibres and/or dust. Hand tools generate the least amount of dust and fibres. 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:	
Skin Protection:	Direct skin contact can be minimised by wearing long-sleeved shirts and long trousers, a cap or hat, and gloves. Work clothes should be washed regularly and separately from other clothes.
Eye Protection:	When handling these products overhead or in enclosed or poorly-ventilated areas such as ceiling spaces or risers, eye contact with dust or fibre can be avoided by wearing ventilated non-fogging dust-resistant goggles conforming to Australian and New Zealand Standards AS/NZS 1336.
Respiratory Protection:	None normally required. If dust is generated in enclosed or poorly-ventilated areas, an approved particulate respirator conforming to Australian and New Zealand Standards AS/NZS 1715 and 1716 is recommended. P1, P2 or N95 type respirators are appropriate. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly, and kept in clean storage when not in use.
Personal Hygiene:	Washing of exposed skin with soap and water at the end of a shift or as required is recommended as a comfort measure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	A matt of fibrous material resembling wool. It is supplied in different shapes and sizes, in outer packaging. It may be rigid or flexible, and facings such as aluminium foil and glass tissues applied to meet specific purposes.
Odour:	Not applicable
pH:	Not applicable
Boiling Point:	Not applicable
Melting Point:	>704°C
Vapour Pressure/Density:	Not applicable
Specific Gravity (H_2O = 1)	Generally low, but variable depending on facings
Volatile Organic Compounds (VOC) Content / % Volatiles:	Very low; <1%
Flash Point:	Not applicable
Decomposition Temperature:	>300°C
Lower/Upper Explosive Limits:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable. The cured binder is stable and will remain intact for the life of the product under normal atmospheric conditions.
Incompatible Materials / Conditions to Avoid:	No reported incompatibilities. Acids, alkalis or organic solvents may cause degradation of binder.
Hazardous Reactions / Decomposition Products:	None known

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicology data: The fibre component of these products is classified by Safe Work Australia (formerly ASCC/NOHSC) as Mineral Wool (Not Elsewhere Specified). In accord with EU ATP 31 (2009) these fibres are not classified as irritant, and being bio-soluble they are not regarded as carcinogenic. Glass Mineral Wool with ECOSE® Technology is bio-soluble, which means that any fibres inhaled into the lungs dissolve in body fluids and are then cleared from the lungs. They are certified as having low biopersistence, e.g. after inhalation, as specified under Note Q as listed in the Australian Hazardous Substances Information System and in the Australian Approved Criteria documentation. Fibres of these products comply with the short-term bio-persistence test and fulfil the requirements of Australian and international authorities on bio-solubility. SWA (formerly ASCC/NOHSC) and international authorities do not classify mineral wool fibres with high bio-solubility as carcinogenic or as capable of causing fibrosis.

Fibres are generally clumped by the binder or resin coating and single strand respirable fibre is present only in trace amounts when any dust is formed in the workplace during installation. Bound fibre is not of respirable size. Extensive research over the past 50 years on workers handling these fibres and products in many countries has shown that the inspirable and respirable size fibres are not harmful, having no long term health effects or respiratory effects.

Toxicology test data is generally not available on the products, but is estimated as being very low with LD50 >5000 mg/kg.

Health Effects: Acute (short-term)

Swallowed:	Unlikely in normal use, but may result in temporary itching of the lips, mouth and throat. Attempting to swallow large amounts would be expected to cause gagging and possibly vomiting.
Eyes:	May cause eye discomfort resulting in watering and redness.
Skin:	Handling repeatedly during installation may cause temporary itching of exposed skin. This is not an allergy and usually disappears quickly.
Inhaled	Unprotected exposure to high levels of dust of these products (during installation or removal) may cause discomfort of the nose, throat, and upper and lower respiratory tract, especially in persons suffering from upper respiratory or chest complaints such as hay fever, asthma or bronchitis.

Health Effects: Chronic (long-term)

There are no known long-term health effects.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Neither the raw materials nor the finished product contain any ozone-depleting chemicals This product is not ecotoxic to air, water or soil, by composition. No harm to fish or wildlife would be caused by this product.
Persistence and Degradability:	Will not bio-accumulate. Less than 1% leachable organic carbon if landfilled. Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 13%.

SECTION 13: DISPOSAL CONSIDERATIONS

Place in plastic bags or containers and close or seal for disposal in accordance with local authority guidelines. Label as NON-HAZARDOUS insulation wool or as general building waste (non-hazardous), as appropriate to assist local authorities waste disposal sites. Department of Environment and Climate Change NSW classifies glasswool insulation as General Solid Waste (non-putrescible), and local authorities will usually advise any local handling arrangements at their disposal sites.

SECTION 14: TRANSPORTATION INFORMATION

Transport Requirements:	Glass Mineral Wool with ECOSE® Technology products are not classified as Dangerous Goods and have no special transport requirements.
UN Number:	None allocated
Packing Group:	None allocated
Class:	None allocated
HAZCHEM Code:	None allocated
Subsidiary Risk	None allocated

SECTION 15: REGULATORY INFORMATION

Poisons Schedule: None allocated.

No specific regulatory requirements are applicable regarding occupational health and safety, consumer protection or environmental protection measures.

SECTION 16: OTHER INFORMATION

The following references are intended as guides to good industrial practice applicable to building and construction products.

AS/NZS 1336	Recommended Practices for Occupational Eye Protection
AS/NZS 1715, 1716	Selection, Use and Maintenance of Respiratory Protective Devices

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END of MSDS