



**Knauf Insulation GmbH**

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product:** Earthwool® Insulation with ECOSE® Technology      **MSDS Number:** 1018  
**Trade Designations:** Unfaced Batt and Blanket Insulation, Faced Batt and Blanket Insulation  
**Supplier:** Knauf Insulation Pty Ltd (ABN: 73 129 827 336)      **Date Issued:** August 26, 2009  
**Address:** Unit 2, 39 Devlan Street      **Product Stewardship Support Line:** 1-800-KNAUFi  
Mansfield, Qld 4122      **24 hr Emergency Phone:** Alastair Wild  
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**Important Notice:** This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with the Australian Safety and Compensation Commission ASCC (formerly National Occupational Health and Safety Commission NOHSC) guidelines. As such, the information in it must not be altered, deleted or added to. The Supplier will issue a new MSDS when there is a change in product specifications and/or ASCC guidelines/regulations. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization.

### SECTION 2 – HAZARDS IDENTIFICATION

#### NON-HAZARDOUS SUBSTANCE – NON-DANGEROUS GOOD

**STATEMENT OF HAZARDOUS NATURE:** Not classified as Hazardous according to the criteria of the Australian Safety and Compensation Commission ASCC (formerly National Occupational Health and Safety Commission NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3<sup>rd</sup> Edition. Non-Dangerous Goods under State and Commonwealth legislation. Risk and Safety phrases are not applicable to this product.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Name:</b>	<b>Proportion:</b>	<b>CAS Number</b>
Fibrous glass	>85%	-
Heat cured resin	<15%	25104-55-6
Mineral oil (solvent refined)	<2%	-

**Other properties:** The fibres and particles are amorphous (non-cryalline). The resin and solvent refined mineral oils bind the fibres and particles together and minimize the release of dusts. The heat cured resin is stable and will remain intact for the life of the product under normal atmospheric conditions.

### SECTION 4 - FIRST AID MEASURES

**Swallowed:** Rinse the lips and mouth with water, give water to drink, and seek medical attention.

**Eye:** Flush with copious amounts of water. If symptoms persist, seek medical attention.

**Skin:** Sluice with water and, if itching persists, seek medical attention.

**Inhaled:** Remove to fresh air. If symptoms persist, seek medical attention.

**Notes to doctor:** This product can be slightly irritating 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.

## SECTION 5 - FIREFIGHTING MEASURES

**Specific Hazards:** Non flammable. No fire or explosion hazard exists.

**Extinguishing Media:** Use waterfog to cool intact containers and nearby storage areas.

**Firefighting Procedures:** If product is present in a fire, toxic gasses may evolve. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

**Hazardous Decomposition Products:** Resin binders and facings may decompose, smolder or burn in fire situations or if heated over 300 C.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

If product is torn or loose, reseal and minimize fibre release. Personnel directly involved in clean up should wear personal 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. Reuse where possible or place in a sealable plastic bag for disposal according to local authority guidelines.

## SECTION 7 - HANDLING AND 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. Glass wool insulation, once installed, does not release dust or fibres, and does not cause any health effects.

**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.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Standards: Australian Safety and Compensation Commission ASCC (formerly National Occupational Health & Safety Commission NOHSC) Australia Occupational Exposure Standard:** None allowed for this product, but for airborne respirable fibres 0.5f/ml time-weighted average (TWA) standard is recommended and a standard of 2.0 mg/cubic metre time-weighted average (TWA) for non respirable fibres (inspirable dusts). ASCC standards provide that all exposures should be kept as low as practicable. Knauf Insulation anticipates that airborne respirable fibre levels will very rarely exceed 0.5 f/ml in user applications. During most applications and installation of this product, no special ventilation will be required. However, if dusty, or in confined spaces, local exhaust ventilation should be considered. For continuous manufacturing situations using this product the need for ventilation should be evaluated and, where high fibre levels are likely, ventilation systems 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.

**Eye Protection:** When handling glass wool insulation, particularly handling it 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 dust resistant goggles conforming to Australian and New Zealand Standards AS/NZS 1336.

**Skin Protection:** Direct skin contact can be minimised by wearing normal work clothing, a cap or hat, and standard duty gloves conforming to Australian Standard AS 2161. Work clothes should be washed regularly and separately from other clothes. Gloves may be used for improved comfort when handling and installing product.

**Respiratory Protection:** When handling glass wool insulation, particularly during work in enclosed or poorly ventilated areas, an approved Class 1 particulate respirator conforming to Australian and New Zealand Standards AS/NZS 1715 and 1716 is recommended.

**Personal Hygiene:** Washing of exposed skin with soap and water at the end of a shift or as required is recommended.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** A matt of brown fibrous material resembling wool. It is supplied in different shapes and sizes and packaged in plastic. It is flexible. Facings such as kraft paper or aluminum foil laminates are applied to meet specific purposes.

**Odour:** Slight amine odour

**pH:** Not applicable

**Boiling Point:** Not applicable

**Melting Point:** >704°C

**Vapour Pressure:** Not applicable

**Specific Gravity:** Variable

**Solubility in Water:** Insoluble

**Evaporation Rate:** Not applicable

**Vapour Density:** Not applicable

**Percent Volatiles:** Very low; <1%

**Flash Point:** Not applicable

**Decomposition Temperature:** >300°C

**Lower/Upper Explosive Limits (LEL/UEL):** Not applicable

## SECTION 10 – STABILITY AND REACTIVITY

**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 Polymerisation:** None known

**Conditions to Avoid:** None known

**Hazardous Decomposition Products:** None known

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Acute Effects:** Products used in high temperature applications (above 177°C) may release gases (carbon dioxide, formaldehyde, amines) from the resin bonding which are irritating to the eyes, nose and throat during initial heat-up. In confined or poorly ventilated areas, use air supplied respirators during the first heat-up cycle.

**Swallowed:** Unlikely under normal conditions of use, but would result in irritation of the lips, mouth and stomach.

**Eye:** Glass wool insulation dust is a mechanical irritant, if it gets into the eyes may cause eye discomfort resulting in watering and redness.

**Skin:** Handling glass wool insulation and its dust may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.

**Inhaled:** The dust may cause discomfort of the nose, throat and respiratory tract, especially in those suffering from upper respiratory or chest complaints such as hay fever, asthma or bronchitis.

**Chronic:** There are no known long term health effects. Glass 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 glass wool fibres with high bio-solubility as carcinogenic.

## SECTION 12 – ECOLOGICAL INFORMATION

**Ecotoxicity:** Neither the raw materials nor the finished product contain any ozone depleting chemicals. This product is not classified as a hazardous air pollutant.

Glass wool insulation is bio-soluble and in most ecosystems it would be expected to solubilize over a period of weeks to months. Binder-coated glass wool is hydrophobic, therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Place in sealed, appropriately labeled plastic bag and dispose of or in accordance with local authority guidelines. Clean area with micro-filter equipped vacuum or wet sweep. Any waste material should be cleaned up and disposed of in accordance with local authority guidelines. Use protective equipment as described in Section 8 when handling uncontained material.

## SECTION 14 – TRANSPORTATION INFORMATION

**Transportation Requirements:** Glass wool insulation is not regulated as a Dangerous Good. No special transport requirements are necessary.

**UN Number:** None allocated.

**Class:** None allocated.

**Subsidiary Risk:** None allocated.

**Packing Group:** None allocated.

**Hazchem Code:** None allocated.

## SECTION 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.

## SECTION 16 – OTHER INFORMATION

### **Additional Information and Reference Documents:**

Insulation Council of Australia and New Zealand: [www.icanz.org.au](http://www.icanz.org.au)

Poisons Information Centre 13 11 26 (Australia Wide)

National Code of Practice for the Preparation of Material Safety Data Sheets

2<sup>nd</sup> Edition [NOHSC:2011 (2003)], April 2003

National Code of Practice For The Labelling of Workplace Substances [NOHSC:2012 (1994)], March 1994,

Australian Government Publishing Service, Canberra

### **Australian Standards Reference:**

AS/NZS 1336 Recommended practice for occupational eye protection.

AS/NZS 1715 Selection, use and maintenance of respiratory protective devices.

AS/NZS 1716 Respiratory protective devices.

AS/NZS 2161 Occupational protective gloves.

### **MSDS Revision Summary**

**Issue Date:** August 26, 2009

**Supersedes Date:** July 1, 2009

**Reason for Issue:** New contact