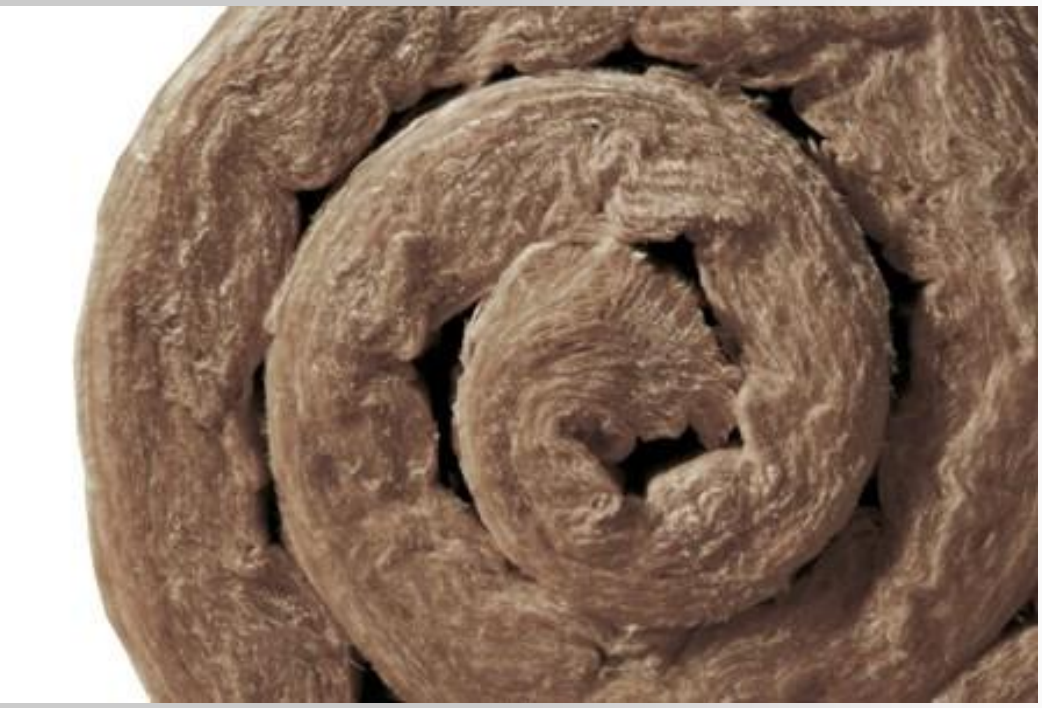
KNAUF INSULATION
it's time to save energy



Version 4.1

# Glass Mineral Wool with ECOSE® Technology

with ECOSE® TECHNOLOGY

# SAFETY DATA SHEET
# Glass Mineral Wool with ECOSE® Technology

According to Regulation (EC) No 1907/2006, Annex II, as amended., Commission Regulation (EU) No 2015/830 of 28 May 2015.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

| | |
|---|---|
| - | Knauf Insulation Glass mineral wool |
| **Product name** | Glass Mineral Wool with ECOSE® Technology |
| **Product number** | KI_DP_101 |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| **Identified uses** | Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction. |

### 1.3. Details of the supplier of the safety data sheet

| | |
|---|---|
| **Supplier** | Knauf Insulation<br>Am Bahnof<br>97346 Iphofen<br>Germany<br>Tel: +32 4 379 02 31<br>www.knaufinsulation.com<br>sds@knaufinsulation.com |
| **Region** | UK |
| **Country Contact** | Tel: +44 (0) 1744 766 666<br>technical.uk@knaufinsulation.com |

### 1.4. Emergency telephone number

| | |
|---|---|
| **Emergency telephone** | Tel: +44 (0) 1744 766 666<br>(Monday - Friday, 08:00 hrs - 17:00 hrs) |

# Glass Mineral Wool with ECOSE® Technology

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (EC 1272/2008)**

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

### 2.2. Label elements

**Hazard statements** NC Not Classified

**The following sentences and pictograms are printed on packaging**

The mechanical effect of fibres in contact with skin may cause temporary itching.

http://www.knaufinsulation.com/comfort-and-handling

### 2.3. Other hazards

**Specific hazards** Not applicable.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**Glass Mineral Wool** **87 - 100%**

CAS number: — EC number: 926-099-9 REACH registration number: 01-2119472313-44-XXXX

EU index number: 650-016-00-2
Ingredient notes:(1)

**Classification**
Not Classified

**Thermo set, inert polymer bonding agent derived from plant starches** **0 - 13%**

CAS number: —

**Classification**
Not Classified

For full text of H-statements: see SECTION 16.

**Ingredient notes** (1) 650-016-00-2 - Man made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide ($Na_2O+K_2O+CaO+MgO+BaO$) content greater than 18% by weight meeting the requirements of Note Q of regulation n° 1272/2008 and therefore not classified carcinogenicity.

CAS: Chemical Abstracts Service.

**Other information** Possible facing or encapsulation materials: glass veil, or polyester mat or aluminium or Kraft paper or encapsulated in low density polyethylene (LDPE) and metallised LDPE film.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation** Remove from exposure. Rinse the throat and clear dust from airways.

**Ingestion** Drink plenty of water if accidentally ingested.

**Skin contact** If mechanical irritation occurs, remove contaminated clothing and wash skin gently with cold water and soap.

**Eye contact** Rinse abundantly with water for at least 15 minutes.

### 4.2. Most important symptoms and effects, both acute and delayed

**General information** The mechanical effect of fibres in contact with skin may cause temporary itching.

### 4.3. Indication of any immediate medical attention and special treatment needed

**General information** If any adverse reaction or discomfort continues from any of the above exposures, seek professional medical advice.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Water, foam, carbon dioxide (CO2), and dry powder.

### 5.2. Special hazards arising from the substance or mixture

**General information** Products do not pose a fire hazard in use; however, some packaging materials or facings may be combustible. Products of combustion from product and packaging - carbon dioxide, carbon monoxide and some trace gases such as ammonia, nitrogen oxides and volatile organic substances.

### 5.3. Advice for firefighters

**General information** In large fires in poorly ventilated areas involving packaging materials respiratory protection / breathing apparatus may be required.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** In case of presence of high concentrations of dust, use the same personal protective equipment as mentioned in section 8.

### 6.2. Environmental precautions

**Environmental precautions** Not relevant.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Vacuum cleaner or dampen down with water spray prior to brushing up.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** No specific measures. Cut using a knife, do not use a saw or use power tools. Avoid unnecessary handling of unwrapped product. Provide adequate ventilation.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** To ensure optimum product performance; when packaging is removed or opened; products should be stored inside or covered to protect them from ingress of rain water or snow. Storage arrangements should ensure stability of stacked products and use on a first in first out basis (FIFO) is recommended.
Delivered packed in polyethylene film and or on wooden pallets.

**Incompatible materials** No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### 7.3. Specific end use(s)

**Specific end use(s)** Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

**Glass Mineral Wool**

Long-term exposure limit (8-hour TWA): WEL 2 fibres/ml 5 mg/m³ Machine-made mineral fibre (except for refractory ceramic fibres and special purpose fibres)
WEL = Workplace Exposure Limit

None at European level, refer to member state guidelines and legislation.

### 8.2. Exposure controls

**Appropriate engineering controls** No specific measures.

**Eye/face protection** Use goggles especially if working above shoulders. Eye protection according to EN 166 is advised.

**Hand protection** Use gloves to avoid itching in conformity with EN 388.

**Other skin and body protection** Cover exposed skin.

**Hygiene measures** After contact, wash hands with cold water and soap.

**Respiratory protection** Wearing a face mask type in accordance with EN 149 FFP1 is recommended when using products in confined atmosphere or during operations which can generate emission of any dust.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Solid.<br>Rolls. Panel. Loose fibre. |
| **Colour** | Brown. |
| **Odour** | Not relevant. |
| **Odour threshold** | No data available. |
| **pH** | Not relevant. |
| **Melting point** | Not relevant. |
| **Initial boiling point and range** | Not relevant. |
| **Flash point** | Not relevant. |
| **Evaporation rate** | Not relevant. |
| **Flammability (solid, gas)** | Not relevant. |
| **Upper/lower flammability or explosive limits** | Not relevant. |
| **Vapour pressure** | Not relevant. |
| **Vapour density** | Not relevant. |
| **Density** | 9 to 35 kg/m³ |
| **Solubility(ies)** | Generally chemically inert and insoluble in water. |
| **Auto-ignition temperature** | Not relevant. |
| **Decomposition Temperature** | Not relevant. |
| **Viscosity** | Not relevant. |
| **Explosive properties** | Not relevant. |
| **Oxidising properties** | Not relevant. |

### 9.2. Other information

| | |
|---|---|
| **Nominal diameter of fibres** | 3 - 5 µm |
| **Length weight geometric mean diameter less 2 standard errors** | < 6 µm |
| **Orientation of fibres** | Random |

# Glass Mineral Wool with ECOSE® Technology

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** None.

### 10.2. Chemical stability

**Stability** Binder will decompose above 200°C.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None in normal conditions of use.

### 10.4. Conditions to avoid

**Conditions to avoid** Heating above 200 °C.

### 10.5. Incompatible materials

**Materials to avoid** None.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** None in normal conditions of use. Decomposition of binder above 200°C may produce carbon dioxide and some trace gases. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** The mechanical effect of fibres in contact with skin may cause temporary itching.

**General information** Classification not applicable for this product; in accordance with European Regulation 1272/2008, note Q.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** This product is not ecotoxic to air, water or soil, by composition.

### 12.2. Persistence and degradability

**Persistence and degradability** Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 13%

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Will not bioaccumulate.

### 12.4. Mobility in soil

**Mobility** Not considered mobile. Less than 1% leachable organic carbon if landfilled.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** Not relevant.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** [17 06 04] Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**Disposal methods** Dispose of in accordance with regulations and procedures in force in country of use or disposal.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**
No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

# Glass Mineral Wool with ECOSE® Technology

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU legislation**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

The European Regulation on Chemicals No 1907/2006, Registration, Evaluation, Authorisation of Chemicals (REACH) enacted on June 1st 2007 requires the provision of Safety Data Sheet (SDS) for hazardous substances and mixtures / preparations.
Knauf Insulation mineral wool products (panels, batts or rolls), are defined as articles under REACH and therefore a Safety Data Sheet for these products is not a legal requirement.
In accordance with industry practice and voluntary commitments, Knauf Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of mineral wool throughout the product life.

### 15.2. Chemical safety assessment

Not relevant.

## SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
CAS: Chemical Abstracts Service.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
PBT: Persistent, Bioaccumulative and Toxic substance.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
UN: United Nations.
vPvB: Very Persistent and Very Bioaccumulative.

# Glass Mineral Wool with ECOSE® Technology

**General information**

All products manufactured by Knauf Insulation are made of non-classified fibres and are certified by EUCEB.

EUCEB, European Certification Board of Mineral Wool Products - www.euceb.org. The EUCEB trademark certifies that the manufactured fibres have a chemical composition within the ranges of exonerated reference fibres, which have been tested in accordance with European protocols and have been shown to be in conformity with Note Q, exoneration criteria for carcinogenicity, of the Regulation (EC) 1272/2008.

The mineral wool producers commit to EUCEB to:
• supply sampling and analysis reports established by laboratories recognized by EUCEB, proving that the fibres comply with one of the four criteria of exoneration described in Note Q,
• be controlled, twice per year, of each production unit by an independent third party recognized by EUCEB (sampling and conformity to the initial chemical composition),
• put in place procedures of internal self-control in each production unit.

Products meeting EUCEB certification requirements can be recognised by the EUCEB logo printed on the packaging.

**Further information can be obtained from**

www.euceb.org www.knaufinsulation.com

| | |
|---|---|
| **Revision comments** | New document format |
| **Revision date** | 29/05/2017 |
| **Revision** | 4.1 |
| **Supersedes date** | 27/09/2016 |
| **SDS number** | 4518 |
| **Product Families** | Earthwool Loft Rolls, Earthwool FactoryClad Rolls, Earthwool FrameTherm Rolls & Slabs, Earthwool Room-in-Roof Rolls, Earthwool Acoustic Rolls & Slabs, Earthwool Cavity Slabs, Earthwool Universal Slabs, Earthwool Duct Slab, Space Insulation, OEM Rolls & Slabs, Retail Loft Roll, Knauf Saver Value Triple Loft Insulation, Everyday Eco Loft Insulation, EKO Loft Rolls, Kalzip, Earthwool OmniFit rolls and slabs, Therma-quilt |
| **OEM Product Families** | PBE, DRS, DAP, CHM, TSP, RSB, MCH, CNF, CTL, WWC, AUT, HTC, SPA |
| **Other information** | In 2001, the International Agency for Research on Cancer (IARC) reclassified glass mineral wool fibres from Group 2B (possibly carcinogenic) to Group 3 «agent which cannot be classified as for their carcinogenicity to humans». (See Monograph Vol 81, http://monographs.iarc.fr/) |

This Safety Data Sheet / Product Data Sheet does not constitute a workplace assessment.
Information contained in this document represents the state of our knowledge regarding this product as of the date of issue of the document. Attention of users is drawn to possible risks taken when the product is used for other applications than the ones it has been designed for.