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

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
Am Bahnof
97346 Iphofen
Germany
Tel: +32 4 379 02 31
www.knaufinsulation.com
sds@knaufinsulation.com

Region UK
Country Contact Tel: +44 (0) 1744 766 666
technical.uk@knaufinsulation.com

1.4. Emergency telephone number
Emergency telephone Tel: +44 (0) 1744 766 666
(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

<table>
<thead>
<tr>
<th>Classification (EC 1272/2008)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical hazards</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Health hazards</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

#### 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Composition</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
<th>EU index number</th>
<th>Ingredient notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Mineral Wool</td>
<td>87-100%</td>
<td>—</td>
<td>926-099-9</td>
<td>01-2119472313-44-XXXX</td>
<td>650-016-00-2</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Thermo set, inert polymer bonding agent derived from plant starches</td>
<td>0-13%</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

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 (Na₂O+K₂O+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.
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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

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

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal diameter of fibres</td>
<td>3 - 5 μm</td>
</tr>
<tr>
<td>Length weight geometric mean diameter less 2</td>
<td>&lt; 6 μm</td>
</tr>
<tr>
<td>standard errors</td>
<td></td>
</tr>
<tr>
<td>Orientation of fibres</td>
<td>Random</td>
</tr>
</tbody>
</table>
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


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.
PBT: Persistent, Bioaccumulative and Toxic substance.
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

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.