







SAFETY DATA SHEET

Rock 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.

1.1. Product identifier

- Knauf Insulation Rock mineral wool.
- Product name Rock Mineral Wool with ECOSE® Technology
- Product number KI_DP_201

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 Bahnhof 97346 Iphofen Germany sds@knaufinsulation.com Tel: +32 4 379 02 31 www.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) |

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.

| SECTION 3: Compositio | n/information on ingredients | |
|--|---|---|
| 3.2. Mixtures | | |
| Rock Mineral Wool | | 90 - 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 polym starches CAS number: — Classification Not Classified | er bonding agent derived from plant | 0 - 10% |
| For full text of H-stateme | nts: see SECTION 16. | |
| Ingredient notes | oxide and alkali earth oxide (Na ₂ O+K ₂ O+Ca | cate) fibres with random orientation with alkaline aO+MgO+BaO) content greater than 18% by of regulation n° 1272/2008 and therefore not |
| | CAS: Chemical Abstracts Service. | |
| Other information | Possible facing materials: glass veil, or poly | vester mat or aluminium or Kraft paper, wired mats. |

| SECTION 4: First aid measure | es | |
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| 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 immedia | te 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 meas | sures | |
| 5.1. Extinguishing media | | |
| Suitable extinguishing media | Water, foam, carbon dioxide (CO2), and dry powder. | |
| 5.2. Special hazards arising fr | om 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 | se measures | |
| 6.1. Personal precautions, pro | tective 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 precaution | <u>s</u> | |
| 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 section | ns | |
| Reference to other sections | For personal protection, see Section 8. For waste disposal, see Section 13. | |

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 To ensure optimum product performance; when packaging is removed or opened; products Storage precautions 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

Rock 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. |

| SECTION 9: Physical and Chemical Properties | | |
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| 9.1. Information on basic physical and chemical properties | | |
| Appearance | Solid. Roll or panel. | |
| Colour | Ochre. | |
| Odour | Not relevant. | |
| Odour threshold | No data available. | |
| рН | Not relevant. | |
| Melting point | < 1000 °C according to DIN 4102-17. | |
| 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. | |
| Relative density | 30 - 250 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 | < 5 µm | |
| Length weight geometric mean diameter less 2 standard errors | < 6 µm | |
| Orientation of fibres | Random | |

| 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 | s 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. | |

| SECTION 12: Ecological Inform | nation | |
|--|--|--|
| 12.1. Toxicity | | |
| Toxicity | This product is not ecotoxic to air, water or soil, by composition. | |
| 12.2. Persistence and degrada | ability | |
| Persistence and degradability | Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 10% | |
| 12.3. Bioaccumulative potentia | | |
| 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 method | <u>s</u> | |
| 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. | |

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 Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

| 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 purpos |
| | of assuring safe handling and use of mineral wool throughout the product life. |

Not relevant. **SECTION 16: Other information** Abbreviations and acronyms ADR: European Agreement concerning the International Carriage of Dangerous Goods by used in the safety data sheet 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.

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 | 3.1 |
| Supersedes date | 28/09/2016 |
| SDS number | 4577 |
| Construction Insulation Products (CST) | Earthwool Building Slabs, Earthwool Cavity Slabs, Earthwool Flexible Slabs, Earthwool Roof Slabs, Earthwool Floor Slabs, Earthwool External Wall Slabs, Earthwool Duct Slab, KalzipTechnical Insulation Products, Rocksilk Fire Barrier |
| Technical Insulation Products (TI) | Wired Mats - Galvanised Steel, Wired Mats - Stainless Steel, High Temperature Boards, High Temperature Products, Standard Lamella Mats, High Compressive Strength Lamella Mats, Standard Duct Boards, Duct Rolls, Marine, Miscellaneous TI, Blocks, Tank Wall Boards, Tank Roof Boards, Pipe sections -Cut-From-Block, Pipe sections - Wound |
| Other information | In 2001, the International Agency for Research on Cancer (IARC) reclassified rock 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.