



Rock Mineral Wool - High Temperature Products

KNAUFINSULATION

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| Revision Date: | 2013-10-31 | Print date: | 2013-10-31 |
| Product No.: | KI_DP_202 | SDS-ID: | SKe-EN/1.0 |

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Knauf Insulation Rock mineral wool.

Product name: Rock Mineral Wool - High Temperature Products

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

<u>Identified use(s):</u> 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

| Head Office | Knauf Insulation |
|------------------|-------------------------|
| | Am Bahnhof |
| | 97346 Iphofen |
| | Germany |
| | Tel:+32 (0) 1048 8460 |
| | sds@knaufinsulation.com |
| | www.knaufinsulation.com |
| Country Contact: | Slovakia - n/a |

1.4. Emergency telephone number

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

67/548/EEC: The product is not classified.

GHS/CLP CE N°1272/2008 The product is not classified.

2.2. Label elements

There are no Risk Phrases associated with this product.

The following sentences and _____ The following sentences and pictograms are printed on packaging:

pictograms are printed on packaging:

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



unventilated area wear disposable face mask.

Ventilate

possible.

working area if



water before washing.

Waste should

according to

local regulations.



vacuum equipment.



be disposed of



Wear goggles when working overhead.

2.3. Other hazards

Specific hazards: When heated to temperatures above 200°C for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| 67/548/EE | C: |
|-----------|----|
|-----------|----|

| <u>%:</u> | CAS-No.: | <u>EC No.:</u> | <u>REACH Reg.</u> <u>No:</u> | Chemical name: | Hazard classification: | <u>Notes:</u> |
|-----------|----------|----------------|---------------------------------|---|------------------------|------------------|
| 90 - 100 | - | 926-099-9 | 01-2119472313- | Rock Mineral Wool | - | (1), (2), (3) |
| 0 - 10 | - | | - | Thermo set,inert polymer based on cured phenol formaldehyde resin | - | |

GHS/CLP CE N°1272/2008

| <u>%:</u> | CAS-No.: | <u>EC No.:</u> | <u>REACH Reg.</u> <u>No:</u> | Chemical name: | Hazard classification: | Notes: |
|-----------|----------|-------------------|--|--|---|----------------------------------|
| 90 - 100 | - | 926-099-9 | 01-2119472313- | Rock Mineral Wool | - | (1), (2), (3) |
| 0 - 10 | - | | - | Thermo set,inert polymer based on cured phenol formaldehyde resin | - | |
| Notes: | | e N 1 (; | varth (CaO + MgO lote Q of directive 272/2008. 2) CAS-No.: Chen 3) Rock mineral w 5 regulation n° 127 | an (machine) made vitreous + NaO + K2O) > 18 % in we 97/69/EEC and Classification nical Abstract Service ool insulation fibres are not of 72/2008 (page 335 of the JC | eight meeting the requirer on, Labelling and Packagi classified carcinogenic ac ICE L353 of December 3 | nents of ng (CLP), cording |

Possible facing materials: glass veil, or polyester mat or aluminium or Kraft paper, wired mats.

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SECTION 4: FIRST AID MEASURES

| 4.1. Description of first aid measures | | |
|--|--|--|
| Inhalation: | Remove from exposure. Rinse the throat and blow nose to clear dust. | |
| <u>Skin contact:</u> | 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. | |
| Ingestion: | Drink plenty of water if accidentally ingested. | |

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

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

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

Extinguishing media: Water, foam, carbon dioxide (CO2), and dry powder.

5.2. Special hazards arising from the substance or mixture

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

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

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

<u>Personal precautions:</u> 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 Not relevant. precautions:

6.3. Methods and material for containment and cleaning up

<u>Methods for cleaning up:</u> Vacuum cleaner or dampen down with water spray prior to brushing up.

6.4. 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

| Safe handling advice: | Avoid unnecessary handling of unwrapped product. |
|------------------------|---|
| Technical measures: | No specific measures. Cut using a knife, do not use a saw or use power tools. |
| Technical precautions: | Provide adequate ventilation. |

7.2. Conditions for safe storage, including any incompatibilities

| Storage conditions: | |
|--------------------------|---|
| - | 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. |
| | No incompatible groups noted. |
| | Delivered packed in polyethylene film and or on wooden pallets. |
| 7.3. Specific end use(s) | |
| Specific use(s): | Not relevant. |

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

8.1. Control parameters

Exposure limits:

Occupational exposure limits:

| CAS-No.: | Chemical name: | <u>As:</u> | Exposure li | <u>mits:</u> | <u>Type:</u> | Notes: | References: |
|----------|--|------------|-------------|--------------|--------------|--------|-------------|
| - | Synthetic mineral fibres (such as basalt, glass, slag) | - | 2 vl/cm3 | 4 mg/m3 | 8 h | - | SK |

8.2. Exposure controls

Engineering measures: No specific measures.

| Respiratory equipment: | 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. |
|------------------------|---|
| Hand protection: | Use gloves to avoid itching in conformity with EN 388. |
| Eye protection: | Use goggles especially if working above shoulders. Eye protection according to EN 166 is advised. |
| Skin protection: | Cover exposed skin. |

<u>Hygiene measures:</u> After contact, wash hands with cold water and soap.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appearance: | Solid. |
|-----------------------------------|--|
| <u>Form:</u> | Roll or panel. |
| <u>Colour</u> | Ochre. |
| <u>Odour:</u> | Not relevant. |
| <u>pH:</u> | Not relevant. |
| Boiling point: | Not relevant. |
| Flash point: | Not relevant. |
| <u>Flammability (solid, gas):</u> | Not relevant. |
| Explosion limits: | Not relevant. |
| Relative density: | 30 - 250 kg/m3 |
| <u>Solubility:</u> | Generally chemically inert and insoluble in water. |

9.2. Other information

Fibre melting point: > 1000 °C according to DIN 4102-17. Approved. = <700°C

Nominal diameter of fibres. 3 - 7 μm

Length weight geometric mean diameter less 2 standard errors: \approx 6 µm

Orientation of fibres: Random.

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| SECTION 10: STABILITY | AND REACTIVITY |
|--------------------------------------|---|
| 10.1. Reactivity | |
| Reactivity: | None. |
| 10.2. Chemical stability | |
| Stability: | None. |
| 10.3. Possibility of hazardous | reactions |
| Hazardous Reactions: | None in normal conditions of use. |
| 10.4. Conditions to avoid | |
| Conditions/materials to avoid: | None. |
| 10.5. Incompatible materials | |
| Incompatible materials: | None. |
| 10.6. Hazardous decomposition | on products |
| Hazardous decomposition products: | When heated to temperatures above 200°C for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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

Classification not applicable for this product; in accordance with the directive 97/69/EC and European Regulation 1272/2008, nota Q. Weighted clearance half life of fibres, with length greater than 20µm after intra-tracheal instillation, is less than 40 days (result obtained from a test conform to the European protocol).

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| SECTION 12: ECOLOGIC | AL INFORMATION | | |
|-------------------------------------|---|--|--|
| 12.1. Toxicity | | | |
| Ecotoxicity: | This product is not ecotoxic to air, water or soil, by composition. | | |
| | | | |
| 12.2. Persistence and degrace | lability | | |
| <u>Degradability:</u> | Inert inorganic product with Thermo set, inert polymer based on cured phenol formaldehyde resins; 0 - 10% | | |
| | | | |
| 12.3. Bioaccumulative potent | ial | | |
| Bioaccumulative potential: | Will not bio-accumulate. | | |
| | | | |
| 12.4. Mobility in soil | | | |
| Mobility: | Not considered mobile. Less than 1% leachable organic carbon if landfilled. | | |
| | | | |
| 12.5. Results of PBT and vPv | <u>/B assessment</u> | | |
| <u>PBT/vPvB:</u> | Not relevant. | | |
| 10 C Other advance official | | | |
| 12.6. Other adverse effects | | | |
| Other adverse effects: | None known. | | |
| | | | |
| SECTION 13: DISPOSAL CONSIDERATIONS | | | |
| 13.1. Waste treatment metho | ds | | |

| Waste from residues: | Dispose of in accordance with regulations and procedures in force in country of use or disposal. |
|-------------------------|--|
| Contaminated packaging: | Dispose of in accordance with regulations and procedures in force in country of use or disposal. |
| EWC-code: | 17 06 04, Non-hazardous substance. |

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SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number

<u>UN-No:</u>

14.2. UN proper shipping name

Proper Shipping Name:

14.3. Transport hazard class(es)

Class:

14.4. Packing group

Packing group:

14.5. Environmental hazards

Marine pollutant:

Environmentally Hazardous - substance:

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk: Not relevant.

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SECTION 15: REGULATORY INFORMATION

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

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.

This material Safety Data Sheet / Product Data Sheet is in accordance with the EU directives 67/548/EEC, 1999/45/EEC, 1907/2006, 1272/2008 and 453/2010.

15.2. Chemical Safety Assessment

CSA status: Not relevant.

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SECTION 16: OTHER 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, is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres, which comply with the exoneration criteria for carcinogenicity (Note Q) of the Directive 97/69/EC and the Regulation (EC) 1272/2008.

To ensure that fibres comply with the exoneration criteria all tests and supervision procedures are carried out by independent, expert qualified institutions. EUCEB ensures that the producers of mineral wool have put in place self-control measures.

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 of the Directive 97/69/EC,
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.Eurima.org www.knaufinsulation.com

Moreover, in 2001, the 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/)



Product Families

: High Temperature Boards, Lamella Mats, Wired Mats, Felt Mats, Pipe Sections, Tank Boards, Marine, HVAC Fire Protection Boards

Additional information:

Change to Sections: New document format

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.