SAFETY DATA SHEET

Rock Mineral Wool - High Temperature Products

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 Rock mineral wool.
Product name	Rock Mineral Wool - High Temperature Products
Product number	KI_DP_202

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 Tel: +32 4 379 02 31 sds@knaufinsulation.com 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)

Rock Mineral Wool - High Temperature Products

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

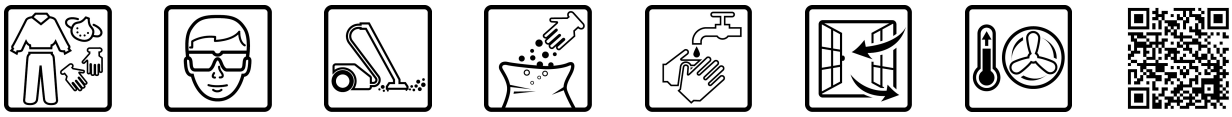
Environmental hazards Not Classified

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 For product with binder: When heated 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

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 polymer based on cured phenol formaldehyde resin **0 - 10%**

CAS number: —

Classification
Not Classified

The full text for all hazard statements is displayed in Section 16.

Ingredient notes 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.

Other information 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 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.

Rock Mineral Wool - High Temperature Products

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

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.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Solid. Roll or panel.
Colour	Ochre.
Odour	Not relevant.
Odour threshold	No data available.
pH	Not relevant.
Melting point	> 1000 °C according to DIN 4102-17. Approved. = <700°C
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	3 - 7 µm
Length weight geometric mean diameter less 2 standard errors	≈ 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

Possibility of hazardous reactions None in normal conditions of use.

10.4. Conditions to avoid

Conditions to avoid None.

10.5. Incompatible materials

Materials to avoid None.

10.6. Hazardous decomposition products

Hazardous decomposition products For product with binder: When heated 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

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.

Rock Mineral Wool - High Temperature Products

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 based on cured phenol formaldehyde resins; 0 - 10%

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.

Rock Mineral Wool - High Temperature Products

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.

Rock Mineral Wool - High Temperature Products

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.

Rock Mineral Wool - High Temperature Products

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 2.3, 10.6, 16

Supersedes date 26/09/2017

Revision date 18/12/2017

Revision 3.4

SDS number 4578

Product Families High Temperature Boards, Lamella Mats, Wired Mats, Felt Mats, Pipe Sections

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.