

Section 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY
1.1 Product identifier

 STONEWOOL – High alumina, low silica wool ²
1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Thermal insulation for construction applications

No uses advised against for physical health and environmental considerations as covered by REACH.

In terms of site use, the product shall be used in accordance with technical guidance published by ROCKWOOL®.

1.3 Details of the supplier of the Safe Use Instruction Sheet

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Section 2. HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture

 There is no hazard statement associated with this product. ROCKWOOL® mineral wool is not classified as dangerous according to (Regulation (EC) No 1272/2008)^(IV) on classification, labelling and packaging of substances and mixtures (CLP).

2.2 Label elements

The overall conclusion in accordance with the CLP regulation, the REACH registration and Globally Harmonized System (GHS) is that there are no hazardous classifications associated with ROCKWOOL® fibres in respect to physical, health and environmental aspects.

2.3 Other hazards

Use of high speed cutting tools can generate dust.

If in contact with constant heat >175 °C the binder will slowly be broken down. Further information see Section 8

Section 3. COMPOSITION / INFORMATIONS on INGREDIENTS

| Substance | E.C. number (III) | Amount weight (%) | 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, (version 1/6/2015) | REACH substance registration number |
|---------------------------|--------------------------|--------------------------|---|--|
| Stone wool ^(I) | 926-099-9 | 95 – 100% | Not classified (II) | 01-211-947-2313-44 |
| Binder | | 0 – 5% | Not classified | |
| Mineral oil | | 0 – 0.5% | Not classified | |

(I) 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 and fulfilling one of the nota Q conditions

(II) Non classified H351 "suspected of causing cancer". Stone wool fibres are not classified carcinogenic according to the nota Q of the Directive 97/69/EEC and the regulation n° 1272/2008 (IV)

(III) E.C.: EC-no, determined by the European Commission for identifying materials

(IV) 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02008R1272-20150601&from=EN1/6/2015> (Note Q) p. 476, classification p. 1376.

-The products do not contain SVHC or CMR substances (Carcinogen, Mutagen, Reprotoxic) under REACH >0.1%

-The products do not contain CLP classified substances >0.1%

1) The European Regulation (ER) on Chemicals No 1907/2006 (REACH) enforced on June 1st 2007 requires Safety Data Sheet (SDS) only for hazardous substances and mixtures/preparations. Mineral wool products (panels or rolls), are articles under REACH and therefore, SDS is not legally required. Nevertheless, Rockwool decides to provide its customers with the appropriate information for assuring safe handling and use of mineral wool through this Safe Use Instructions Sheet.

2) This product belongs to HT wools (high-alumina, low-silica (HT) wool) (IARC Monograph, 2002)

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Possible facing materials Mineral fleece, laminated paper-aluminium, laminated aluminium, oxidised bitumen 110/30, wired mesh, poly-propylene film, coated laminated mineral fleece.

Section 4. FIRST AID MEASURES

4.1 Information according to the different exposure route:

4.1.1 Inhalation

Remove from exposure. Rinse the throat and blow nose to clear dust

4.1.2 Skin

If itching occurs, remove contaminated clothing and wash skin gently with cold water and mild soap.

4.1.3. Eye

Rinse abundantly with water for at least 15 minutes.

4.1.4. Ingestion

Drink plenty of water if accidentally ingested.

4.2 Most important symptoms and effects, both acute and delayed

The mechanical effect of coarse fibres in contact with throat, skin or eyes may cause temporary itching/inconvenience.

4.3 Indication of any immediate medical attention and special treatment needed

None required.

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

Section 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

5.1.1. Suitable extinguishing media

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

5.1.2. Unsuitable extinguishing media none

5.2 Special hazards arising from the substance or mixture None special. Use normal body and respiratory protection for fire.

5.3 Advice for firefighters The unfaced products are non combustible, some packaging materials or facings may however be combustible.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

None required

6.3 Methods and materials for containment and cleaning up

Clean with vacuum or dampen with water spray prior to sweeping up

6.4 Reference to other sections

See section 8 for more details

Section 7. HANDLING and STORAGE

7.1 Precautions for safe handling

No specific measure. Use preferably a knife for cutting . If a power tool is used, it must be equipped with efficient air suction.

Ensure adequate ventilation of workplace. See section 8

Avoid unnecessary handling of unwrapped product. See section 8.

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7.2 Conditions for safe storage, including any incompatibilities

| | |
|----------------------------|--|
| Technical measures | No special measures necessary. |
| Suitable storage condition | Products should be stored dry. If possible also materials in original packaging. Materials without packaging should always be stored dry. |
| Incompatible materials | None |
| Packaging material | Products are packed in polyethylene film or cardboard on wooden or stone wool pallet |

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: None at European level. Refer to member state guidelines and legislation.

8.1 Control parameters

Workplace exposure limit (WEL) must not be exceeded . (total respirable , 8-hour time weighted averages.) .The air concentration of inhalable fibres will be under normal working conditions less than 0,5 per cm³.

8.2 Exposure controls

8.2.2 Individual protection measures

(a) Eye protection

Wear goggles when working overhead. Eye protection to EN 166 is advised

(b) Skin protection,

(i) Hand protection

Use gloves to avoid itching in conformity with EN 388

(ii) Other

Cover exposed skin

(c) Respiratory protection

When working in unventilated area or during operations which can generate emission of any dust, wear a disposable face mask. Type in accordance with EN 149 FFP1 is recommended.

At high temperatures, >175 °C, usually not found in building construction the binder will slowly decompose and trace gases will be released over a shorter period. Gases should be vented and appropriate respirators used.

The following sentence and pictograms are printed on packaging

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



Ventilate working area if possible



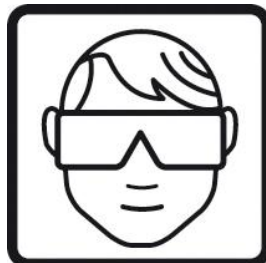
Waste should be disposed of according to local regulations



Cover exposed skin.
When working in unventilated area wear disposable face mask



Clean area using vacuum equipment



Wear goggles when working overhead



Rinse in cold water before washing

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Section 9. PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | |
|-------------------------------------|---|
| a) Appearance | Solid , article in roll, slab or shape. Grey-green-yellow (stone wool) |
| b) Odour | Odourless |
| c) Odour treshold | see above- no odour, therefore not applicable |
| d) pH | Not applicable material is a solid |
| e) Melting point | >1000 °C |
| f) Boiling point | Not relevant |
| g) Flash point | Not relevant |
| h) Evaporation rate | Not relevant |
| i) Flammability | Not relevant, material non-combustible |
| j) Explosive properties | Not relevant |
| k) Auto ignition temperature | Non- combustible |
| l) Decomposition temperature | When Insulation wool is heated to approx 175 oC for the first time release of binder decomposition products occurs. |
| m) Density | Depending on the product (approx. from 20 to 300 kg/m3) |
| n) Water solubility | Generally chemically inert and insoluble in water. |
| o) Fat solubility | Not applicable |
| p) Oxidizing properties | Non oxidizing material, therefore not relevant. |

Section 10. STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Not reactive

10.4 Conditions to avoid

None specified

10.5 Incompatible materials

None specified

10.6 Hazardous decomposition products Under 175 °C : None. See also 8.2.2.(c)

Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) **Acute toxicity**

No acute toxicity

b) **Irritation**

In the case of coarser fibres there can be mechanical effects on skin, upper respiratory system (mucous membranes) and eyes that can cause temporary, self-fading effects (e.g. itching). No chemical effects ensue.

c) **Corrosivity**

No corrosivity

d) **Sensitisation**

No sensitisation

e) **Repeated dose toxicity**

No repeated dose toxicity

f) **Carcinogenicity**

None. Owing to their high bio-solubility, the fibre used in ROCKWOOL® stone wool insulation materials are assessed as free from suspicion of possible carcinogenic effects in accordance with EU Directive 97/69/EC (Note Q). In October 2001, the International Agency for Research on Cancer (IARC) classified Rock (stone) wool insulation as Group 3 (not classifiable as to their carcinogenicity in humans). i.e. not suspected of causing cancer in humans.

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Further in the EU, the classification as carcinogenic is not applicable for mineral wools in this product; in accordance with the directive 97/69/EC and European Regulation 1272/2008, note Q. (See also section 15). In REACH and GHS, ROCKWOOL® fibres have no hazard classification.

In Germany the fibres are also TRGS 905, section 2.3. Compliant

g) **Mutagenicity**

No mutagenicity

h) **Toxicity for reproduction**

No toxicity for reproduction

Section 12. ECOLOGICAL INFORMATION

12.1 Toxicity

None. This product is not expected to cause harm to animals or plants during normal conditions of use. Stone wool is principally made from non scarce rock material and recycled stone wool.

12.2 Persistence and degradability

None

12.3 Bioaccumulative potential

None

12.4 Mobility in soil

None

12.5 Result of PBT and vPvB Assessment

No assessment required

12.6 Other adverse effects

Relying on entrapped air for its thermal properties, does not, and never has used blowing agents with Ozone Depleting Potential or Global Warming Potential. No flame retardants are added.

Section 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

(a) Waste from residues

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

(b) Packaging materials

Dispose of in accordance with local regulations.

(c) Code from European Waste Catalogue

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(d) Disposal information

Clean ROCKWOOL® waste and wooden pallets can be supplied to most factories to be recycled, after contact for the transport and conditions or be landfilled according to local regulations. Packing material being polyethylene can be supplied for recycling to PE manufacturers.

Section 14. TRANSPORT INFORMATION

14.1 UN Number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport Hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

None specified

Section 15. REGULATORY INFORMATION

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

The overall conclusion in accordance with the CLP, GHS and REACH regulations is that there are no hazardous classifications associated with ROCKWOOL® fibres in respect to physical, health and environmental aspects

15.2 Chemical safety assessment

 No assessment required

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Section 16. OTHER INFORMATION

Although REACH ³ do not require a material safety data sheet to be provided for ROCKWOOL® insulation, this format is used by ROCKWOOL® to provide standardized health and safety information.

This Safety Data Sheet is made in accordance with: REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 in the latest consolidated version Primo August /2015 ⁴.

The Stone wool fibres of this product are exonerated from the carcinogenic classification according to the European directive 97/69/CE and the Regulation (EC) 1272/2008 if they fulfil one of the criteria of the note Q.

All products marketed by ROCKWOOL® are made of non-classified fibres and are certified by EUCEB or RAL.

Both certifications are voluntary and certify that the product is in compliance with the parameters laid down in Note Q, as defined by Directive 97/69/EC and Regulation (EC) No 1272/2008

RAL identifies the certificate issued by Gutgemeinschaft Mineralwolle E.V. (GGM) of Frankfurt (Association for the quality of mineral wool, <http://www.ral-mineralwolle.de>).

EUCEB (European Certification Board for Mineral Wool Products - www.euceb.org) is issued by an independent certification body.

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 97/99/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.

The products responding to the EUCEB certification can be recognized by the EUCEB logo put on the packaging. EUCEB is an ISO 9001:2000 certified association.



In addition to the European legislation (certified by EUCEB), Germany has further requirements concerning mineral wool. The Gütegemeinschaft Mineralwolle (GGM) ensures that these requirements are fulfilled and grants the RAL quality mark. The additional German requirements are based on the national regulation, thus Chemikalien-Verbotsverordnung (ChemVerbotsV) and Gefahrstoffverordnung (GefStoffV).

ROCKWOOL® stone wool insulation manufactured by DEUTSCHE ROCKWOOL GmbH & Co. KG is certified according to EUCEB (European legislation) and RAL (German legislation).



Persons who wish to obtain more detailed information have to contact the producer (address on the first page of this sheet).

Information given in this document is on the state of our knowledge regarding this material at the time of issue.

It is given in good faith.

The 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.

This information reflects typical values and is not a product specification. No warranty expressed or implied hereby

3) <http://echa.europa.eu/web/guest/regulations/reach/legislation>

4) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2006R1907:20120601:EN:PDF>