

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 and /or acoustical, vibration and technical insulation and fire protection for construction, industry, rail or marine application.

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

ROCKWOOL® Technical Insulation
www.rockwool-rti.com

Producing factories:

ROCKWOOL® A/S, Denmark
A/S ROCKWOOL®, Norway
ROCKWOOL® Limited, United Kingdom
Deutsche ROCKWOOL® Mineralwoll GmbH & Co. OHG, Germany
ROCKWOOL® B.V., Netherlands
ROCKWOOL® Polska Sp. z o.o., Poland
ROCKWOOL®, a.s., Czech Republic
ROCKWOOL® Hungary Kft, Hungary
ROCKWOOL® Peninsular S.A.U., Spain
ROCKWOOL® Adriatic d.o.o., Croatia
ROCKWOOL® France S.A.S., France.

1.4 Emergency Telephone number Tel.: +31 475 35 3915
Email: math.mourmans@rockwool.com**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 EU Directives 67/548/EEC and 1999/45/EC and its amendments (Regulation (EC) No 1272/2008) on classification, labelling and packaging of substances and mixtures

2.2 Label elements

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

2.3 Other hazards

Use of high speed cutting tools can generate dust

When heated to approximately 200 °C for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate the eyes and respiratory system. Further information can be found in Section 8

1)The European Regulation (ER) on Chemicals N° 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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Section 3. COMPOSITION / INFORMATIONS on INGREDIENTS

Substance	E.C. number ^(III)	Amount weight (%)	Classification and labelling (Regulation (CE) n°1272/2008)	Classification and labelling (European directive 67/548/EEC)	Reach substance registration number
Stone wool ^(I)	926-099-9	95 – 100%	Not classified ⁽²⁾	Not classified	01-211-947-2313-44
Binder		0 – 5%	Not classified	Not classified	
Mineral oil		0 – 0.5%	Not classified	Not classified	
Silicon oil or silicon emulsion		0 – 0.5%	Not classified	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 (page 335 of the JOCE L353 of December 31, 2008)

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

Possible facing materials: Mineral fleece, laminated aluminium, wired mesh (galvanized or stainless steel), polyester mat, coated mineral mat.

Section 4. FIRST AID MEASURES

4.1 Information according to the different exposure route:

4.1.1 Inhalation

Remove from exposure. Rinse the throat with cold, potable water and blow nose to clear dust. Leave dusty area for fresh air. Consult a physician if discomfort persists.

4.1.2 Skin

If itching occurs, remove contaminated clothing and wash skin gently with cold water and mild soap. Do not rub or scratch. Consult a physician if itching persists.

4.1.3. Eye

In case of inconvenience or discomfort, check for and remove any contact lenses. Rinse abundantly with potable cold water for at least 15 minutes. Do not rub eyes. Seek medical attention if inconvenience persists.

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

5.3. Advice for firefighters

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

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 sections 8 and 13 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.

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

8.1. Control parameters

Workplace exposure limit (WEL) must not be exceeded . (total respirable , 8-hour time weighted averages.) .The dust concentration of inhalable fibres will be under normal working conditions less than 0,1 per cm³.

8.1. Exposure controls

8.1.2 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. When insulation wool is heated to approximately 200°C for the first time(s), a release of binder components and binder decomposition products occurs. The fumes can be detected by their acrid odour and high concentrations of these gases may irritate the eyes and respiratory system. In general, decomposition products from pyrolysis or burning of organic material can cause respiratory sensitisation. There are no recorded incidents of respiratory sensitisation from gases released from ROCKWOOL® products. However, general dilution ventilation and/or local exhaust ventilation or should be provided as necessary to control exposure to fumes when high temperature appliances are first put into service If working under these initial conditions a face mask with fresh air supply should be used. Dependent on operating temperatures decomposition of binder in hot applications may last up to approximately 96 hours.

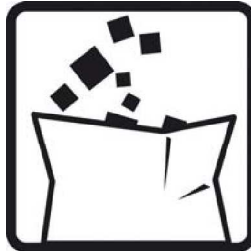
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The following sentence and/or pictograms are printed on packaging

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



Ventilate working area if possible



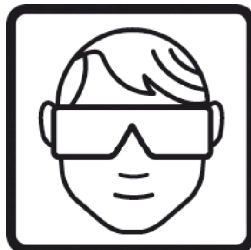
Waste should be disposed of according to local regulations



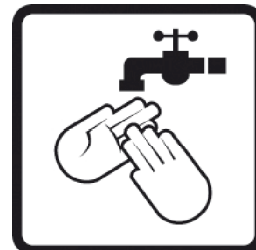
Cover exposed skin.
When working in unventilated area wear disposable face mask



Clean area using vacuum equipment



Wear goggles when working overhead



Rinse in cold water before washing

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 200 oC for the first time release of binder decomposition products occurs |
| m) Density | Depending on the product (approx. from 27 to 240 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. |

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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 When mineral wool is heated to more than 200 °C, this starts a decomposition reaction of the binder, the products of which can be detected by their odour. Emissions usually occur only during the first heating of a mineral wool insulated apparatus. It is advisable to ensure good ventilation when such appliances are first put into service. The decomposition products are those that would be expected from any organic material and are mainly derived from pyrolysis or burning of the resin. These decomposition products, which only occur for a short time, are mainly CO₂, CO, carbon particles and water

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 physical effects on skin, upper respiratory system (mucous membranes) and eyes than 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 its carcinogenicity in humans). i.e. not classified as possibly carcinogenic to humans.

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, nota Q. (See also section 15). In Reach, 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

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12.6. Other adverse effects

Relying on entrapped air for its thermal properties, ROCKWOOL® stone wool does not, and never has used blowing agents with Ozone Depleting Potential or Global Warming Potential

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 several ROCKWOOL® factories to be recycled, after contact for the transport and conditions. Contact the relevant producing ROCKWOOL® factory or your ROCKWOOL® sales office for specific information on local recycling options. 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 REACH regulation is that there are no hazardous classifications associated with ROCKWOOL fibres in respect to physical, health and environmental considerations

15.2. Chemical safety assessment

No assessment required

Section 16 OTHER INFORMATION

Although REACH 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 in accordance with EU Directive 91/155/EEC, amended by 93/112/EC and 2001/58/EC. Includes formatting changes as detailed in Annex II of REACH (May 2010)

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 nota Q of these texts.

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 not classified through full 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 Gutegemeinschaft 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.

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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.

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

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