

1. PRODUCT AND COMPANY IDENTIFICATION

Generic product name	PAROC stone wool
Recommended use	Stone wool products for building, technical and sound insulation. The products are form shaped like slabs, boards, mats or pipe sections
Producer	Paroc Group Oy Energiakuja 3 00180 Helsinki P.Box 240 00181 Helsinki +358 46 876 8000 +358 46 876 8002 Communications@paroc.com

2. HAZARDS IDENTIFICATION

Most important hazards	The mechanical effect of fibers in contact with skin may cause temporary itching. Decomposition of binder above 190°C may produce carbon dioxide and some trace gases.
Specific hazards	none

3. COMPOSITION / INFORMATIONS on INGREDIENTS

Substance	Amount weight (%)
Mineral (stone) wool ⁽¹⁾	95-99 %
Binder	1-5%
Oil	0.1-0.5 %

⁽¹⁾ 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

Possible facing materials: glass fibre tissue, polyester mat, aluminium foil or paper

4. FIRST AID MEASURES**Information according to the different exposure route:**

- **Inhalation** Remove from exposure. Rinse the throat and blow nose to clear dust
- **Skin contact** If itching occurs because of mechanical effects of the fibres, remove contaminated clothing and wash skin gently with cold water and soap.
- **Eyes contact** Rinse abundantly with water for at least 15 minutes.
- **Ingestion** Drink plenty of water if accidentally ingested.

If any adverse reaction or discomfort continuous from any of the above exposure, seek medical professional advise.

The European Regulation (ER) on Chemicals N° 1907/2006 (REACH) enforced on June 1st 2007 requires Material Safety Data Sheet (MSDS) only for hazardous substances and mixtures/preparations. Mineral wool products (panels or rolls), are articles under REACH and therefore, MSDS is not legally required. Nevertheless, Paroc Group decides to provide its customers with the appropriate information for assuring safe handling and use of mineral wool through this *Safe Use Instructions Sheet*.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Products do not pose a fire hazard in use; however, some packaging materials or facings may be combustible. Suitable extinguishing media; water, foam, carbon dioxide (CO₂), and dry powder. In large fires in poorly ventilated areas or involving packaging materials respiratory protection / breathing apparatus may be required. Products of combustion from product and packaging - carbon dioxide, carbon monoxide and some trace gases such as ammonia, nitrogen oxides and volatile organic substances

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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

Environmental protection

Not relevant

Methods for cleaning up

Vacuum cleaner or dampen down with water spray prior to brushing up.

7. HANDLING and STORAGE

Handling

- Technical measures

No specific measure.

Use preferably a knife. If a power tool, it must be equipped with efficient air suction.

- Precautions

Ensure adequate ventilation of workplace.

When installing insulation in unventilated spaces a suitable disposable facemask should be used.

When handling product, cover exposed skin. Wear goggles when working with product overhead.

Dispose of waste in accordance with local regulations. Clean area using vacuum equipment.

If itching occurs, it may be lessened by rinsing in cold water before washing. See section 8.

- Safe handling advice

Avoid unnecessary handling of unwrapped product. See section 8.

Storage

- Technical measures

No specific measure

- Suitable storage condition

Keep material in original packaging protected against humidity and mechanical damage until use.

- Incompatible materials

none

- Packaging material

delivered packed in polyethylene film or cardboard on wooden pallet

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Value:

Source	Legal or Recommended Exposure Limit	Exposure
OSHA	1 f/cc TWA (recommended)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
ACGIH	1 f/cc TWA (threshold limit value – TLV)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
OSHA	15 mg/m3 TWA-PEL (total particulate)	Inert dust and particulates not otherwise regulated
	5 mg/m3 TWA-PEL (respirable particulate)	
ACGIH	10 mg/m3 TWA-TLV (inhalable particulate)	Particulates not otherwise classified containing no asbestos and <1% crystalline silica
	3 mg/m3 TWA-TLV (respirable particulate)	

Exposure controls No specific requirements

Individual protection equipments

Respiratory protection

When working in unventilated area or during operations which can generate emission of any dust, wear disposable NIOSH certified dust respirator with an efficiency rating of N95 or higher. Use disposable face masks complying with NIOSH respirator standards, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to ten times the established exposure limits use a half-mask respirator (e.g. MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.

In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent, when fabricating, installing or removing product.

Hand protection

Wear gloves to avoid itching

Eyes protection

Wear goggles when working overhead.

Skin protection

Cover exposed skin. Wear loose fitting, long sleeved and long-legged clothing to prevent irritation. A head cover is also recommended, especially when working with material overhead. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles. Remove fibers from the work clothes, before leaving work to reduce potential skin irritation.

Hygiene measures

rinse in cold water before washing. If working in a very dusty environment it is advisable to shower and change clothes

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

9 PHYSICAL and CHEMICAL PROPERTIES

Physical state	solid
Form	roll, slab, board, pipe section
Colour	greyish
Odour	light resin odour may occur
pH	not applicable
Boiling point	not relevant
Flash point	not relevant
Flammability	not relevant
Melting point	Over 1000°C stone wool begins to soften and melt
Explosive properties	not relevant
Density	from 20 to 250 kg/m ³
Water solubility	generally chemically inert and insoluble in water.
Fat solubility	not applicable

10. STABILITY AND REACTIVITY

Stability	For building: Stable in normal conditions of use For high T uses: Binder will start to decompose around 190°C
Reactivity	Not reactive
Dangerous reactions	None in normal conditions of use
Hazardous decomposition products	For building: None in normal condition of use. For high T uses: Decomposition of binder around 190°C produces carbon dioxide and some trace gases. The duration and amount of release is depending on the thickness of the insulation, binder content and the temperature applied. During first heating, good ventilation or appropriate personal protection equipment are required.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Not toxic. Due to mechanical effect of fibers, mineral wool products can cause temporary skin itching, (redness) of the skin.
Fiber hazard	In October 2001, IARC completed a re-evaluation of respirable mineral wool fibers and classified them in Group 3 (not classifiable as to their carcinogenicity to humans). The European Regulation CE 1272/2008 on classification and labelling and packaging of substances and Mixtures does not classify mineral wool fibers as dangerous if they fulfil criteria for bio-solubility as defined in its Note Q. The European Certification Board for mineral wool products, EUCEB, certify mineral wool products made of fibers fulfilling Note Q ensuring the low biopersistence. References; IARC Monograph 43,1988 and IARC Monograph 81, 2002

12. ECOLOGICAL INFORMATION

This product is not expected to cause harm to animals or plants during normal conditions of use.	
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13. DISPOSAL CONSIDERATIONS

Waste from residues	The products, as supplied, are not expected to be a characteristic hazardous waste under RCRA if discarded. Dispose of waste material according to Federal, State, Provincial, and Local environmental regulations.
Dirty packaging	Dispose of in accordance with local regulations.
Code from European Waste Catalogue	No EPA Waste Numbers are applicable for this product's components.

14. TRANSPORT INFORMATION

International regulations	No specific regulations. This product is not classified as a hazardous material for transport.
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15. REGULATORY INFORMATION

U.S. Regulations

Toxic Substances Control Act (TSCA): All components in this product are listed, as required, on the US EPA TSCA inventory, or are not required to be listed

CERCLA: Includes mineral fiber emissions from facilities manufacturing or processing glass rock or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less; Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Fine mineral fibers).

Clean Air Act: Mineral wool fiber appears on the Clean Air Act-1990 Hazardous Air Pollutants List.

State and Local Regulations: State, Provincial, and Local regulations not identified in this Material Safety Data Sheet may apply.

WHMIS: The products have been classified in accordance with the hazard criteria of the Controlled Product Regulations and this Material Safety Data Sheet contains all the information required by the Controlled Product Regulations

WHMIS IDL: No components are listed on the IDL

WHMIS Classification: No components are classified as controlled products.

European Regulations

The European directive 97/69/EC replaced by the regulation (EC) n° 1272/2008 concerning the classification, labelling and packaging of the substance and the mixtures does not classify glass fibres as hazardous, if they are in compliance with the note Q of this Regulation.

The note Q specifies that classification as carcinogenic does not apply if:

- a short-term biopersistence test by inhalation has shown that fibres longer than 20µm have a weight half life less than 10 days, or
- a short-term biopersistence test intra-tracheal instillation has shown fibres longer than 20 µm have a weighted half life less than 40 days, or
- an appropriate intra-peritoneal test has shown no evidence of excess carcinogenicity, or
- a suitable long term inhalation test has shown absence of relevant pathogenicity or neoplastic changes.

Mineral wool (glass, stone and slag wool) are not classified under the European Regulation on classification, labelling and packaging of substances and mixtures ("CLP" Regulation – Regulation EC n° 1272/2008) which is the European implementation of the international Globally Harmonized System ("GHS")

16. OTHER INFORMATION

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 manufactured by Paroc Group company fulfil the above exoneration criteria. Proof of this is the EUCEB label on product.



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.

Further information;

Safety in the Use of Mineral and Synthetic Fibers, Occupational Safety and Health Series. International Labor Office (ILO).

Information about "Health and Safety Research on Rock- and Slag-wool" can be obtained from the North

American Insulation Manufacturers Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, USA). Home-page:

<http://www.naima.org>

Person 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 as of November 18 th, 2014.

It is given in good faith.

The attention of users is drawn to possible risks taken when the product is used for other application than the ones it has been designed for.