1. NAME OF PRODUCT AND COMPANY

Product
Stone wool insulation based on Rockwool 1000 fibre.
Principal application. Thermal, fire and soundproofing insulation.

Supplier
Rockwool AB, Box 11505, 550 11 JÖNKÖPING,
Telephone: 036- 570 52 00, Telefax: 036- 570 52 82, Org.nr: 556347-9152
www.rockwool.se, info@rockwool.com

2. HAZARD IDENTIFICATION

Biosoluble stone wool (Rockwool 1000 fibre)
The product has no hazardous qualities but can cause occasional itching caused by the mechanical effect generated by the fibres in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Rockwool stone wool contains mostly stone wool fibres which are of type synthetic inorganic glass similar silicate fibres. The stone wool fibres meet the claims in Note Q according to the European Classification Regulation No 1272/2008 about classification, labeling and packaging (CLP).

To keep the stone wool fibres together a binder is added which by the curing process is transformed into heat-stable plastic (bakelite). A small quantity of oil is added to make the products water repellent and to reduce dusting. Some products have one or two surface layers of for example paper, alu-foil or glass fibres.

Included components
Mineral wool 95-98 %
Bakelite (binder) 1,5 – 4,5 %
Oil (dust binding) 0,5 %

Classification
Rockwool stone wool has no classification.

4. FIRST AID MEASURES

Inhalation
Leave the dusty place and breathe fresh air at inconvenience.

Skin
If skin irritation occurs, do not rub or scratch. Wash off under running water prior to washing with mild soap and water.

Eyes
If eye irritation occurs, do not rub the eyes. Flush eyes with water and consult a physician if irritation persists.

5. FIRE-FIGHTING MEASURES

Stone wool products from Rockwool are non-combustible and do not pose a fire hazard. In case of fire binder disappears and finishes such as paper, cellulose and plastic layer are combustible. Use normal fire fighting methods.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Not applicable.

Environmental precautions
Not applicable.

Decontamination methods
Clean up normally. See paragraph 7, 8 and 13.
7. **HANDLING AND STORAGE**

**Handling**
Unpack material at application site and cut with a special knife on a clean, solid and plane surface. Knives can be ordered from Rockwool AB. Waste is placed directly in collection bags. Ensure good general ventilation, particularly in narrow spaces and at demolition. Local exhaust should be used at extra dustable jobs. When cleaning up, avoid dry sweeping, large pieces are placed directly in refuse sacks, residue is sucked up by vacuum cleaner.

**Storage**
The products are stored in original packagings until they are used. They are protected against moisture and mechanical damages.

8. **EXPOSURE CONTROLS/PERSOAL PROTECTION**

**Exposure limit values**
In Sweden occupational exposure limits for respirable fibres in air-borne dust from mineral wool is 1 fibre /cm³. European limit is missing.

**Limitation of exposure**
Respiratory protection (dust filter P2) should be used if the limit might be exceeded despite of technical measures and if problems with respiratory organs appear, for example when handling old mineral wool in narrow spaces.

At very dustable work suitable protective clothing, closing tightly around sensitive skin areas such as neck and forearms, should be used. Wear dust repelling protective gloves and clothing, without pockets or lapels. Wear eye protectors when working above eye level. Lens carriers should always wear eye protectors.

During first heating above 150 – 200 °C, decomposition products of the binder may release hazardous gases. The duration of release is dependent upon the thickness of the isolation, binder content and the temperature applied. Therefore it is advised to ventilate the relevant area well during first heating period and only to access it with full face masks with fresh air supply. In general it is correct to observe a period of 96 hours for this, which needs to be extended if visible smoke and / or a strong and irritating smell is noticed in the room.

**Hygiene measures in general**
Take a shower and change clothes after the work. Work clothes should be stored and washed separately from other clothes.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>The product is in solid form and has a grey-green colour.</td>
</tr>
<tr>
<td>Smell</td>
<td>The product is odourless</td>
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<tr>
<td>Melting point</td>
<td>&gt; 1000°C</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non-combustible material.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>The glass in the fibres has a density of about 2,8 g/cm³. The products has a density of 25-300 kg/m³ depending on application.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water with the exception of dust binding oil.</td>
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</tbody>
</table>

10. **STABILITY AND REACTIVITY**

The products are chemically stable and have no reactivity. At temperatures above 200°C the binder is broken down while smelling gases are leaving. The issue is of short duration. See to that there is a good ventilation until the odour has disappeared and avoid staying in unpleasant smoke. If necessary, use personal protective equipment. See paragraph 8.
11. **TOXICOLOGICAL INFORMATION**

**Acute toxicity**
No acute toxicity whether for inhalation, swallowing or contact with skin or eyes during normal use of the products. Gases appearing during the first heating above 200°C may have a harmful effect.

**Local effects**
Coarse fibres can cause itching and rashes on the skin, irritation in eyes and the upper respiratory system. The itching and possible inflammation are mechanical reactions to coarse fibres (> 5 \( \mu \)m) and are not damaging in the way chemically irritants may be. They generally abate within a short time after the end of exposure.

**Longterm effects**
According to remark Q in directive KIFS 2005:5 from Kemikalieinspektionen stone wool fibres with high biosolubility are classified as not carcinogenic. Roxull stone wool fibres are tested according to the EU minutes ECB/TM 26:27 Rev. 7 1998 and the fibres comply with remark Q’s requirement of biosolubility.

12. **ECOLOGICAL INFORMATION**

Stone wool is a stable product with no known negative environmental impacts. The product can be reused.

13. **DISPOSAL CONSIDERATIONS**

Stone wool is not combustible but may be disposed of without special restrictions. The waste can also be granulated and reused as insulation. The wrapping consists of polyethylene plastic which can be recycled or burned. Pallets of wood are used and they can be recycled or burned.

14. **TRANSPORT INFORMATION**

No special precautions required.

15. **REGULATORY INFORMATIONS**

- **EG-Regulation No 1272/2008 about classification, labeling and packaging (CLP)**
  The fibres meet the claims in Note Q and are thus not classified as carcinogenic.

- **Arbetsmiljöverket´s regulations are valid when working with mineral wool:**
  AFS 2004:1 “Synthetic Inorganic Fibres”
  AFS 2005:17 “Occupational exposure limit values and measures against air contaminants”

- **Labeling of packages**
  Rockwool products are labeled with information about personal protective equipment.

16. **OTHER INFORMATION**

See trade association Swedisol’s writing “God arbetsmiljö vid montering av mineralull” on [www.rockwool.se](http://www.rockwool.se).