

MATERIAL SAFETY DATA SHEET

Company:	ROXUL ASIA SDN BHD (495634-V)		
Trade name:	Products based on rock (stone) wool	Document No:	MSDS-001
Revision No:	1	Issue Date:	28 th January 2008
Authorised By:	Technical Support Managers – Subramaniam Kerisna and John Cha		

1. Identification:

1.1 Trade and synonyms

- Generic name: Stone wool
rock wool
- Trade name: ROCKWOOL®
ROXUL®
LAPINUS®

1.2 Company address:

Roxul Asia Sdn Bhd (495634-V0)
175 A&B, Kawasan Perindustrian Air Keroh
Jalan Lingkungan Usaha
75450 Melaka, Malaysia
Telephone: +60 6 233 2010
Fax: +60 6 233 2012
Email: info@roxul.com

2. Information on ingredients:

Inert mineral wool fibres (Ca-Mg-Al-Silicate) bonded with low amount of organic binder.

3. Hazards identification:

3.1 Mineral wool fibers

The mineral wool fibers may cause (transient mechanical) irritation to skin. High dust levels may irritate the throat and eyes.

4. First-aid measures:

4.1 Skin

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

4.2 Throat and eyes

If irritation occurs, flush eyes with water and/or drink water to clear throat. Do not rub the eyes. Consult a physician if irritation persists.

5. Fire fighting measures:

The products are non-combustible and do not pose a fire hazard. However, packaging and facing material may burn.

n.a. = not applicable

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- 5.1 Suitable extinguishing media:
Water, foam, carbon dioxide or dry powder.
- 5.2 Extinguishing media which must not be used for safety reasons:
None.
- 5.3 Combustion products:
Carbon dioxide, carbon monoxide and trace gases.
- 5.4 Special protective equipment for fire fighters:
Observe normal fire fighting procedure.

6. Accidental release measures:

No special measures required (see Handling and storage).

7. Handling and storage:

- 7.1 Handling:
- Unpack material at application site to avoid unnecessary handling of product.
 - Keep work areas clean. Dispose of scrap material and debris in suitable containers.
 - Spray with water before sweeping or use vacuum equipment.
 - Ensure good ventilation. Local exhaust ventilation may be required if the method of use produces dust levels, which exceed the maximum exposure limit. The need for ventilation systems should be evaluated by a professional industrial hygienist while a professional engineer should conduct the design of specific ventilation systems.
- 7.2 Storage:
- Keep material in original packaging until it is to be used.
 - Store material to protect against adverse conditions including precipitation.

Please contact Roxul Asia for a detailed handling and storage guideline.

8. Exposure controls/personal protection:

Local regulations may apply.

- 8.1 Respiratory protection:
If dust levels exceed applicable exposure limits, use face mask type P2 for convenience.

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- 8.2 Hand protection:
Wear suitable gloves.
- 8.3 Eye protection:
With heavy dust development, wear safety goggles.
- 8.4 Skin protection:
Wear loose fitting, long sleeved and long-legged clothing; clothing is recommended to prevent irritation. A head cover is also recommended, especially when working with material overhead. Gloves are also recommended. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles. Remove SVF dust from the work cloths, before leaving work to reduce potential skin irritation. If working in a very dusty environment, it is advisable to shower and change clothes.

9. Physical and chemical properties:

- 9.1 Appearance: solid, gray-green
- 9.2 Odor: n.a.
- 9.3 pH (a 1000g/H₂O, 25°C): 7-8 (DIN 54275)
- 9.4 Boiling point: n.a.
- 9.5 Melting point: above 1000°C
- 9.6 Flash point: n.a.
- 9.7 Flammability: n.a.
- 9.8 Autoflammability: inflammable
- 9.9 Explosive properties:
- 9.10 Oxidizing properties: n.a.
- 9.11 Vapor pressure: n.a.
- 9.12 Product density: 30 – 200 kg/m³
- 9.13 Solubility: n.a.
- 9.14 Partition coefficient: n.a.
- 9.15 Other data: n.a.

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10 Stability and reactivity:

10.1 Stability: stable

10.2 Reactivity: not reactive

10.3 Thermal decomposition products:

When mineral wool is heated above 200°C, this starts a decomposition reaction of the dust binding mineral oil or the sizing, the products of which can be detected by their odor. Emissions usually occur only during the first heating. 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 (carbon containing) materials, and are mainly derived from pyrolysis or burning the mineral oil or treatment. These decomposition products are mainly carbon dioxide, carbon monoxide, carbon particles, water and trace gasses (e.g. nitrogen dioxide, sulfur dioxide).

11 Toxicological information:

11.1 Coarse fibers

Coarse fibers can cause itching of the skin, foreign body reaction in the upper respiratory system (mucous membranes) and in the eyes. The itching and possible inflammation are a mechanical reaction to the coarse fibers (of more than about 5µm in diameter) and are not damaging in the way chemical irritants may be. They generally abate within a short time after the end of exposure. When products are handled continually, the skin itching generally diminishes.

11.2 Respirable fibers

According to IARC rock (stone) wool is classified as Group 3, "not classifiable as to its carcinogenicity to humans". (In October 2001, the International Agency for Research on Cancer "IARC", part of the World Health Organisation reviewed its 1987 classification of mineral wool fibers and removed them from the list of possible carcinogens).

12 Ecological information:

Stable product with no known adverse environmental effects.

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13 Disposal consideration:

The product can typically be disposed of in an ordinary landfill (local regulation may apply). If you are unsure of the regulations contact the local Department of Environment (DOE).

14 Transport information:

No special precautions.

15 Further information:

15.1 Health aspects:

IARC Working Group on man-made vitreous fibers – volume 81 of the IARC Monographs, Lyon, 9-16 October 2001.

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

North America

Information about “Health and Safety Research on Rock and Slag wool” can be obtained at the North American Insulation Manufacturers Association (NAIMA, 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, USA.) Homepage: <http://www.naima.org>

15.2 Good working practices:

Local regulations may apply.

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