

## Material Safety Sheet

<b>Company</b>	Lapinus Fibres bv		
<b>Trade name</b>	Engineered Mineral Fibres based on High-Alumina, Low-Silica / Roxul <sup>®</sup> 1000 Composition	<b>Product name</b>	<ul style="list-style-type: none"> <li>• Rockbrake<sup>®</sup></li> <li>• Rockseal<sup>®</sup></li> <li>• Rockforce<sup>®</sup></li> </ul>
<b>Revised on</b>	2008-03-08	<b>Replaces issue</b>	2005-03-14
<b>Authorised by</b>	N. Hautus, Health & Safety Officer		

### 1 **Identification:**

#### 1.1 Product

Generic name: Loose engineered mineral fibre, Man-Made Vitreous (silicate) Fibre (MMVF34) based on High-Alumina, Low-Silica Fibres, Roxul<sup>®</sup>1000 Composition, RIF41001, HT-Fibre.

#### 1.2 Company address:

Lapinus Fibres bv  
Delfstoffenweg 2  
6045 JH Roermond, the Netherlands  
P.O. Box 1160  
6040 KD Roermond, the Netherlands

1.3 If further information is required, please call or fax Lapinus Fibres bv, P.O.Box 1160, 6040 KD Roermond  
Tel.: +31.6 53368588 Fax: +31.475 353677 Mail: [nanty.hautus@lapinusfibres.com](mailto:nanty.hautus@lapinusfibres.com)

### 2 **Hazards identification:**

#### 2.1 Mineral fibres

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

### 3 **Information on ingredients:**

Inert vitreous silicate loose engineered mineral fibres

Table 1	CAS-No.	Contents	Exposure Limits
Synthetic vitreous (silicate) fibres	Generic RN 65997-17-3 Specific RN 287922-11-6	95-100%	5 mg/m <sup>3</sup> TWA respirable fraction (OSHA) 15 mg/m <sup>3</sup> TWA total dust (OSHA) 1 fibre/cc TWA (ACGIH)

### 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.

n.a. = not applicable LF007.F14

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### 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.

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## 5 **Fire-fighting measures:**

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

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

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## 6 **Accidental release measures:**

No special measures required (see Handling and Storage)

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## 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 that exceed the maximum exposure limit.
- 7.2 Storage:
- Keep material in original packaging until it is to be used.
  - Store material to protect against adverse conditions including precipitation.

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### 8 Exposure controls/personal protection:

Local regulations may apply.

#### 8.1 Respiratory protection

If dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator. Use disposable face masks complying with NIOSH standards.

#### 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, long-legged, closed work clothes to prevent irritation. After work, rinse hands and unprotected skin with cold water. Then wash with soap and warm water. If working in a very dusty environment it is advisable to shower and change clothes.

### 9 Physical and chemical properties:

9.1 Appearance:	Solid, Grey-green
9.1.1 Odour:	n.a.
9.1.2 pH (at 1000g/H <sub>2</sub> O, 25°C):	7-8 (DIN 54275)
9.1.3 Boiling point:	n.a.
9.1.4 Melting point:	above 1000°C
9.1.5 Flash point: )	
9.1.6 Flammability: )	
9.1.7 Autoflammability: )	Non-flammable DIN 4102
9.1.8 Explosive properties: )	
9.1.9 Oxidising properties:	n.a.
9.1.10 Vapour pressure:	n.a.
9.1.11 Fibre density:	approx. 2.6 g/cm <sup>3</sup>
9.1.12 Solubility:	n.a.
9.1.13 Partition coefficient:	n.a.
9.1.14 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 | Not applicable |

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 odour. 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) material, and are mainly derived from pyrolysis or burning the mineral oil or the sizing. These decomposition products are mainly carbon dioxide, carbon monoxide, carbon particles, water, and trace gasses (e.g. nitrogen dioxide, sulphur dioxide).

### 11 Toxicological information:

#### 11.1 Coarse fibres

Coarse fibres 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 fibres (of more than about 5 µm 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 fibres

##### Animal studies

If fibres are very durable (biopersistent) and present in high concentrations they may lead to disease. This product has been tested in long-term carcinogenicity studies [inhalation and intraperitoneal injection (i.p.)] with no significant increase in lung tumours or abdominal tumours. Short-term biopersistent (inhalation and intra-tracheal injection) studies have shown that the fibres disappear very rapidly from the lung.

In October 2001, the International Agency for Research on Cancer (IARC) evaluated that there is inadequate evidence in experimental animals for this product (high-alumina low-silica (HT) wool).

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### Experiences in humans (Epidemiological Studies)

Large morbidity and mortality studies of both European and North American mineral wool [rock (stone) wool and slag wool] manufacturing workers have been conducted. The studies have found no significant evidence of non-malignant lung disease (e.g. fibrosis).

In October 2001, IARC classified rock (stone) wool as Group 3, "not classifiable as to its carcinogenicity to humans". The 2001 decision was based on the latest epidemiological studies and animal inhalation studies that show no relation between inhalation exposure and the development of tumours.

The Group 3 overall evaluation was based on inadequate evidence in humans and limited evidence in experimental animals due to a significant increase in abdominal tumours after intraperitoneal injection of high doses of fibres.

This product has not been subject to epidemiological studies but consists of the less biopersistent fibres (low-silica, high-alumina (HT) wool), which will disappear even faster from the lung than the rock (stone) wool fibres.

### 12 Ecological information:

Stable product with no known adverse environmental effects.

### 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 your local Public Health Department or the local office of the Environmental Protection Agency (EPA).

### 14 Transport information:

No special precautions.

### 15 Regulatory information:

#### 15.1 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

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### 15.2 Europe – European Community (EC) Classification

The product contains Mineral Fibres [Man-made vitreous (silicate) fibres] that are exonerated from classification as a carcinogen according to Note Q in EU Commission Directive 97/69/EC, and classified as irritating to skin.

#### Germany

This product is exonerated from classification as a carcinogen according to the German Hazardous Substances Ordinance Annex V Nr. 71 as of 1 October 2000.

## 16 **Further information:**

### 16.1 Health Aspects

IARC Working Group on Man-made Vitreous Fibres – Volume 81 of the IARC Monographs, Lyon, 9–16 October 2001.

Safety in the Use of Mineral and Synthetic Fibres, 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).  
Home-page: <http://www.naima.org>

### 16.2 Good Working Practices

Local regulations may apply.

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