

1 PRODUCT AND COMPANY IDENTIFICATION

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|---------------------------|---|
| Material name | Mineral fibres according Note Q |
| Revision date | 20 May 2014 |
| Version # | 02 |
| Cas # | 287922-116 / 1010446-9806 |
| Product code | Roxul [®] 1000, Rockbrake [®] , Rockseal [®] , Rockforce [®] , CoatForce [®] , Lapinus [®] , RIF41001, RIF48003 |
| Product use | Reinforcement in composites. |
| Company name | Contact address ICE |
| Lapinus | Roxul USA Inc. |
| ROCKWOOL B.V. | 4594 Cayce Rd. |
| Industrieweg 15 | Byhalia, MS38611 |
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| 6040 KD Roermond | |
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| Tel. +31 475 353 555 Fax. | Emergency telephone number |
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| ra@lapinus.com | |

2 HAZARDS IDENTIFICATION

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|---------------------------------|---|
| Physical state | Solid. |
| Appearance | Solid, Grey-green. Off-white. |
| OSHA regulatory status | This product is not hazardous according to OSHA 29CFR 1910.1200. IARC classified rock (stone) wool in Group 3 - not classifiable as to its carcinogenicity to human. Newer materials (Nota Q fibres) are found to be non-carcinogenic. |
| Potential health effects | |
| - Routes of exposure | Eye contact. Inhalation. Skin contact. |
| - Eyes | Product dust or powder may cause mechanical eye irritation. |
| - Skin | Dust and/or powder may cause mechanical skin irritation. |
| - Inhalation | Dust may irritate respiratory system. |
| - Ingestion | Ingestion is not likely to be a primary route of occupational exposure. |
| Target organs | Eyes. Skin. Respiratory system. |
| Chronic effects | None known. |
| Signs and symptoms | Dust may irritate the eyes and the respiratory system. Symptoms include itching, burning, redness and tearing. |

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS # | Percent |
|--|-------|---------|
| Synthetic vitreous (silicate) fibres, note Q | * | 95-100 |

Composition comments

*: Generic RN 65997-17-3, specific RN 287922-11-6, specific RN 1010446-98-6.
REACH Registration number: 01-2119472313-44.
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (NA₂O + K₂O + CaO + MgO + BaO) content greater than 18% by weight and fulfilling one of the Note Q conditions.

This product contains no crystalline silica.

4 FIRST AID MEASURES

First aid procedures

- **Eye contact** Contact with dust: Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation persists after washing.
- **Skin contact** If itching occurs: Do not rub or scratch exposed skin. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing. Do not rub or scratch exposed skin.
- **Inhalation** Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort occurs.
- **Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if irritation develops and persists.

Notes to physician

Treat symptomatically.

5 FIRE FIGHTING MEASURES

Extinguishing media

- **Suitable extinguishing media** Dry chemical. Water spray. Carbon dioxide or dry powder.
- **Unsuitable extinguishing media** None known.

Protection of firefighters

- **Specific hazards arising from the chemical** During fire, traces of gases hazardous to health may be formed.

Fire fighting equipment/instructions

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

Specific methods

Use standard fire fighting procedures and consider the hazards of other involved materials.

6 ACCIDENTAL RELEASE MEASURES

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| <u>Personal precautions</u> | Ensure adequate ventilation. Avoid inhalation of dusts from machining operation. Avoid contact with skin and eyes. Wear suitable protective clothing. See Section 8 of the SDS for Personal Protective Equipment. |
| <u>Environmental precautions</u> | Collect and dispose of spillage as indicated in Section 13 of the SDS. |
| <u>Methods for containment</u> | Collect spillage. |
| <u>Methods for cleaning up</u> | Use a vacuum cleaner. If not possible, moisten dust with water before it is collected with shovel, broom or the like. Clean up in accordance with all applicable regulations. |
| <u>Other information</u> | Clean up in accordance with all applicable regulations. |

7 HANDLING AND STORAGE

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| <u>Handling</u> | Handling avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Use personal protective equipment. Change contaminated clothing. Observe good industrial hygiene practices. |
| <u>Storage</u> | Store in a dry place. Store in original packaging. |

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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| <u>Occupational exposure limits</u> | No exposure limits noted for ingredient(s). |
| <u>Engineering controls</u> | Minimize dust generation and accumulation. Observe occupational exposure limits and minimize the risk of inhalation of dust. |
| <u>Personal protective equipment</u> | |
| – Eye/face protection | Use approved safety goggles or face shield. |
| – Skin protection | Wear appropriate clothing to prevent reasonably probable skin contact. |
| – Respiratory protection | In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In case of inadequate ventilation or risk of inhalation of dust, use a suitable NIOSH approved respirator with an appropriate particulate filter. |
| – General hygiene considerations | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9 PHYSICAL AND CHEMICAL PROPERTIES

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|--|---------------------------------|
| - Appearance | Solid, Grey-green. Off-white. |
| - Color | Off-white and green. |
| - Odor | Not applicable. |
| - Odor threshold | Not available. |
| - Physical state | Solid. |
| - Form | Loose fibres. |
| - pH | 7 - 8 |
| - Melting point | > 1832 °F (>1000 °C). |
| - Freezing point | Not available. |
| - Boiling point | Not relevant. |
| - Flash point | Not relevant. |
| - Evaporation rate | Not available. |
| - Flammability | Non-flammable (DIN 4102). |
| - Flammability limits in air, upper, % by volume | Not available. |
| - Flammability limits in air, lower,% by volume | Not available. |
| - Vapor pressure | Not available. |
| - Vapor density | Not available. |
| - Specific gravity | Not available. |
| - Solubility (water) | Insoluble in water. |
| - Partition coefficient (n-octanol/water) | No data available. |
| - Auto-ignition temperature | Not available. |
| - Decomposition temperature | Not available. |
| - Density | 2.6 g/cm ³ (approx.) |

10 CHEMICAL STABILITY AND REACTIVITY INFORMATION

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| <u>Chemical stability</u> | Stable. |
| <u>Conditions to avoid</u> | Avoid dust formation and contacting with incompatible materials. |
| <u>Incompatible materials</u> | Strong acids. Strong bases. |
| <u>Hazardous decomposition products</u> | Carbon dioxide (CO ₂). Carbon monoxide. Trace gases. |
| <u>Possibility of hazardous reactions</u> | Will not occur. |

11 TOXICOLOGICAL INFORMATION

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| <u>Acute effects</u> | May cause mechanical irritation of skin and eyes. Dust may irritate respiratory system. |
| <u>Sensitization</u> | None known. |
| <u>Chronic effects</u> | None known. |
| <u>Carcinogenicity</u> | IARC classified rock (stone) wool in Group 3 – not classifiable as to its carcinogenicity to human. Newer materials (Nota Q fibres) are found to be non-carcinogenic. |
| <u>Epidemiology</u> | Experiences in humans (epidemiological studies) Large morbidity and mortality studies of North American mineral wool [rock (stone) and slag wool] manufacturing workers have been conducted with the traditional mineral wools. The studies have found no significant evidence of non-malignant lung disease (e.g. fibrosis). Note Q has not been subject to epidemiological studies but consists of the less bio persistent fibres, which will disappear even faster from the lung than the rock (stone) wool fibres. |
| <u>Mutagenicity</u> | None known. |
| <u>Reproductive effects</u> | None known. |
| <u>Symptoms and target organs</u> | Dust may irritate the eyes and the respiratory system. |

12 ECOLOGICAL INFORMATION

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| <u>Ecotoxicity</u> | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <u>Persistence and degradability</u> | Not known. |
| <u>Bioaccumulation/Accumulation</u> | No data available. |
| <u>Partition coefficient (n-octanol/water)</u> | No data available. |
| <u>Mobility in environmental media</u> | Low water solubility, expected to sink and migrate into the sediment. Expected to partition to sediment and wastewater solids. Persistence and degradability not available. |

13 DISPOSAL CONSIDERATIONS

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| <u>Disposal instructions</u> | Collect in marked containers and deliver to approved depot. Dispose of waste and residues in accordance with local authority requirements. |
| <u>Waste from residues/ unused products</u> | Dispose of waste and residues in accordance with local authority requirements. |
| <u>Contaminated packaging</u> | No special precautions. |

14 TRANSPORT INFORMATION

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| <u>DOT</u> | Not regulated as dangerous goods. |
| <u>IATA</u> | Not regulated as dangerous goods. |
| <u>IMDG</u> | Not regulated as dangerous goods. |
| <u>TDG</u> | Not regulated as dangerous goods. |

15 REGULATORY INFORMATION

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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| - Hazard categories | Immediate Hazard – No Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No |
| - Section 302 extremely hazardous substance (40 CFR 355, Appendix A) | No |
| - Section 311/312 (40 CFR 370) | No |

Drug Enforcement Administration (DEA) (21 CFR 1308.11–15)

Not controlled.

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS status Non-controlled.

Inventory status

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-------------------------------|--|------------------------|
| - Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| - Canada | Domestic Substances List (DSL) | Yes |
| - Canada | Non-Domestic Substances List (NDSL) | No |
| - China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| - Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| - Europe | European List of Notified Chemical Substances (ELINCS) | No |
| - Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| - Korea | Existing Chemicals List (ECL) | Yes |
| - New Zealand | New Zealand Inventory | Yes |
| - Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| - United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

16 OTHER INFORMATION

Further information HMIS[®] is a registered trade and service mark of the NPCA.

HMIS[®] ratings
 Health: 0
 Flammability: 0
 Physical hazard: 0
 NFPA ratings Health: 0
 Flammability: 0
 Instability: 0

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