Material Safety Sheet in accordance with 91/155 EEC

Company	Lapinus Fibres bv		
Trade name	Engineered Mineral Fibres based on High-Alumina, Low-Silica, Low-Iron-Oxide Fibres	**Product name**	• **CoatForce®** • **Spinrock**
Revised on	2008-03-19	**Replaces issue**	2006-05-01
Authorised by	N. Hautus, Health & Safety Officer		

1 Identification:

1.1 Product
Generic name: Loose engineered mineral fibre, Man-made vitreous (silicate) fibre (MMVF) based on High-Alumina, Low-Silica, Low-Iron-Oxide Fibre Composition, RIF48003, 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, NL-6040 KD Roermond
Tel.: + 31 6 53368588 Fax: +31 475 353677 Mail: nanty.hautus@lapinusfibres.com

2 Hazards identification:

2.1 Mineral fibres
The mineral fibres have been classified (by EU) as irritating (transient mechanical) to skin.
High dust levels may irritate the throat and eyes.

3 Information on ingredients

Engineered inert vitreous silicate loose mineral fibres

Table 1	CAS-No.	Contents	Classification	R-phrases
Synthetic vitreous (silicate) fibres	RN 65997-17-3	95-100%	X_i	Irritating to skin (R:38)

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.

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4.2 Eyes
If irritation occurs, do not rub the eyes. Flush eyes with water and 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.

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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
With heavy dust development and in confined spaces, use disposable facemasks complying with EN149 FFP1 or FFP2 (e.g. 3M model 8710 or any similar NIOSH approved dust mask).

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.
Change clothes and wash on completing work.

9 Physical and chemical properties:

9.1	Appearance:		off white
9.1.1	Odour:		n.a.
9.1.2	pH (at 1000g/H_2O, 25°C):		7-8 (DIN 54275)
9.1.3	Boiling point:		n.a.
9.1.4	Melting point:		above 700°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^3
9.1.12	Solubility:		n.a.
9.1.13	Partition coefficient:		n.a.
9.1.14	Other data:		n.a.

10 Stability and reactivity:

10.1 Stability — Stable

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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).

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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 high-alumina low-silica (HT) wool.

Experiences in humans (Epidemiological Studies)
Large morbidity and mortality studies of both European and 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).

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.

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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.
The high-alumina low-silica fibres have not been subject to epidemiological studies but consists of the less bio persistent fibres (high-alumina low-silica 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:

Stable non-reactive hazardous waste acceptable at landfills for non-hazardous waste.

14 Transport information:

No special precautions.

15 Regulatory information:

15.1 EC Classification

The product contains Mineral Fibres [Man-made vitreous (silicate) fibres]
Danger Symbol: X_i, Irritant(1)
Risk Phrases: Irritating to skin (R:38)
Safety Phrases: Wear suitable protective clothing and gloves (S36/37).

This product is exonerated from classification as a carcinogen according to Note Q in EU Commission Directive 97/69/EC.
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

(1) MMVF with the same size distribution as CoatForce® pass the R38 tests proving that CoatForce® is not chemical irritant.
EU is currently considering the anomaly that CoatForce® is classified R38 despite not being chemical irritant.

15.2 Other Regulations

N.a.

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15.3 Exposure Limits

Recommended Maximum Exposure Limit (MEL) 1 fibre/ml (respirable) and/or 5 mg/m³ (respirable dust), 8 hour Time Weighted Average (TWA).

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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 Labour Office (ILO).

Europe

Information about "Health Aspects. Insulation Wool (Glass-, Stone, and Slag-wool)" can be obtained at the European Insulation Manufacturers Association (EURIMA, Av.- Louise 375, bte 4 , B-1050 Brussels).

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).

16.2 Good Working Practices

Local regulations may apply.
Advise; please follow the "Code of Practice for Manufacturers and Users of Insulation Wool's" edited by the European Insulation Manufacturers Association (EURIMA).