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Chemical products and company identification

Product identifier

Product Name Secondary coated fibres

Product Code Roxul®1000, Rockbrake®, Rockseal®, Rockforce®, Lapinus®, RIF41001, RIF48003,

ROCKWOOL®, RB210, RB205

Recommended use of the chemical and restrictions

on use

Recommended use Additive in composites

Restrictions on use Anything other than the above.

Supplier identification

Company Name **ROCKWOOL B.V**

Company Address **ROCKWOOL B.V ROCKWOOL B.V** Delfstoffenweg 2

P.O. Box 1160 6045 JG Roermond 6040 KD Roermond Netherlands Netherlands

Telephone +31 475 353 555

E-mail (competent person) ra@lapinus.com

Emergency Phone No. Monday to Friday, 09:00 – 17:00 (GMT +1) +31 475 353 555

2. Hazards identification

Hazard classification

According to Notice No. 2016-19 of the Ministry of

Employment and Labor

Not classified as hazardous for supply/use.

Label elements

Pictogram None assigned

Signal Word(s) None assigned

Hazard Statement(s) None assigned

Precautionary Statement(s) None assigned

Hazard or risk other than that included in the

Handling of this material may generate a dust which can cause mechanical irritation of the classification criteria

eyes, skin nose and throat.

3. Composition/information on ingredients

Mixture

Chemical Name (Common and alternative names)	CAS No. or Other Identification Number(s)	Content (%)	Hazard classification
Man-made vitreous (silicate) fibres (MMVF) with random orientation with alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content greater than 18 % by weight]	65997-17-3*	92 - 100	Not classified - According to Note Q(EU)

Generic CAS No. 65997-17-3, Specific CAS No. 287922-11-6, Specific CAS No. 1010446-98-6. See Section 16 for details.

This product does not contain crystalline silica.

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First aid measures



a. Eye contact

b. Skin contact

c. inhalation

d. Ingestion

e. Indication of medical attention and notes for physician:

Self-protection of the first aider

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms develop, obtain medical attention. If irritation occurs, do not rub or scratch, rinse under running water prior to washing thoroughly

IF ON SKIN (or hair): Wash with plenty of water. If irritation (redness, rash, blistering) develops, get medical attention.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. Remove to fresh air immediately. Make victim drink water. Wash hands before breaks and after work.

IF SWALLOWED: Do not induce vomiting wash out mouth with water. If symptoms occur obtain medical attention.

Treat symptomatically.

Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation Avoid breathing dust Avoid contact with skin, eyes or clothing.

5. Firefighting measures

Suitable (and inappropriate) extinguishing agents

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical Special protective equipment and precautions for fire fighters

Non-combustible.. Does not support combustion. Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions. Foam, water spray or fog. Do not use water jet. Direct water jet may spread the fire.

None Known

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing. Handling of this material may generate a dust which can cause mechanical irritation of the eyes, skin nose and throat. Ensure adequate ventilation Avoid contact with skin, eyes or clothing. Avoid breathing dust Take off contaminated clothing and wash it before reuse. In case of inadequate ventilation wear respiratory protection.

Environmental precautions and protective procedures

Methods and material for containment and cleaning up

Stop leak if safe to do so. Use vacuum equipment for collecting spilt materials, where practicable. Damp down to avoid dust generation. Transfer to a lidded container for disposal or recovery. Avoid dust generation Respiratory protection is not necessary if room is well ventilated.

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

Handling and storage

Precautions for safe handling

Ensure operatives are trained to minimise exposures. Ensure adequate ventilation Avoid breathing dust Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Ensure suitable personal protection during removal of spillages. Good hygiene

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practices and housekeeping measures. Keep good industrial hygiene. Do not eat, drink or

smoke at the work place.

Conditions for safe storage, including any

incompatibilities storage temperature Incompatible materials Keep only in the original container/package in a cool well-ventilated place. Keep away from food, drinks and animal food. Keep container tightly closed.

Store at room temperature

Avoid contact with moisture Keep away from: Humidity

8. Exposure controls and personal protection

Exposure standards for chemicals, biological exposure standards, etc.

Refer to member state guidelines and legislation

Workplace exposure limit (WEL) must not be exceeded (total respirable, 8-hour time weight averages). The air concentration of inhalable fibres will be under normal working conditions than 0,5 per cm3.

Occupational exposure limits

SUBSTANCE	Chemical Formula	영문표기 CAS No.	CAS No.	노출기준 TWA		노출기준 STEL		Note
			OAO NO.	ppm	mg/m³	ppm	mg/m ³	11010
흑연 (천연 및 합성, Graphite 섬유제외)	С	Graphite (Natural & Synthetic, Except Graphite fibers, Respirable fraction)	7782-42- 5 호흡성	-	2	-	1	-

ource: 개정 2018. 3.20(고용노동부고시 제 2018-24 호)

Biological Limit Value Not established

Appropriate engineering controls: Ensure adequate ventilation Store in a cool/low-temperature, well-ventilated (dry) place

away from heat and ignition sources.

Personal protection equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection



Respiratory protection is not necessary if room is well ventilated. In case of inadequate ventilation wear respiratory protection.

Eye / face protection

Use eye protection according to EN 166, designed to protect against liquid splashes.

Hand protection



Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Contaminated gloves should be carefully rinsed with water before reuse.

Body protection

Wear suitable protective clothing.. Wear safety or chemical resistant shoes or boots.

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Physical and chemical properties

Appearance solid fibres Colour Grey/ Green Odour Not established Odour threshold Not established

7 - 8 > 1000 °C Melting point/freezing point Initial boiling point and boiling range Not established Not established Flash point Not established Evaporation rate Not established Flammability (solid, gas) Upper/lower flammability or explosive limits Not established Vapour pressure Not established Solubility(ies) Immiscible with water. Vapour density Not established

2.7 - 2.8Relative density n-Octanol / Water Not established Not established Auto-ignition temperature Not established Decomposition temperature Viscosity Not established Molecular mass Not established

Stability and reactivity

Chemical stability and possibility of hazardous

reactions

Keep away from: Acids, Alkalis, humidity

Conditions to avoid Incompatible materials

Avoid contact with moisture Keep away from: Humidity

None anticipated. Not flammable. Hazardous polymerisation will not occur.

Hazardous decomposition products

Carbon monoxide, Carbon dioxide

Toxicological information

Information on likely routes of exposure

inhalation Possible – accidental exposure Indestion Possible - accidental exposure Skin contact Possible - accidental exposure Eye contact Unlikely - accidental exposure

Health hazards information **Acute toxicity - Ingestion**

Acute toxicity - Skin contact

Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw

Acute toxicity - inhalation Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LC50 >5 mg/l (Dust/Mist)

Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw

Skin corrosion/irritation Mixture: Based upon the available data, the classification criteria are not met. Serious eye damage/irritation Mixture: Based upon the available data, the classification criteria are not met. Respiratory sensitization Mixture: Based upon the available data, the classification criteria are not met. Skin sensitization Mixture: Based upon the available data, the classification criteria are not met.

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Carcinogenicity Mixture: Based upon the available data, the classification criteria are not met.

IARC classification: Group 3 Not classifiable as to its carcinogenicity to humans.

EU regulationsNote Q:

Data shows that the classification as a carcinogen need not apply if it can be shown that the substance fulfils one of the following conditions:

 $\boldsymbol{-}$ a short term biopersistence test by inhalation has shown that the fibres longer than 20 $\,$

µm have a

weighted half-life less than 10 days; or

 $\boldsymbol{-}$ a short term biopersistence test by intratracheal instillation has shown that the fibres

longer than 20 µm

have a weighted half-life less than 40 days; or

— an appropriate intra-peritoneal test has shown no evidence of excess carcinogenicity;

or

- absence of relevant pathogenicity or neoplastic changes in a suitable long term

inhalation test.

Germ cell mutagenicityMixture: Based upon the available data, the classification criteria are not met. **Reproductive toxicity**Mixture: Based upon the available data, the classification criteria are not met.

Mixture: Based upon the available data, the classification criteria are not met. Mixture: Based upon the available data, the classification criteria are not met.

Specific target organ toxicity — single exposure Mixture: Based upon the available data, the classification criteria are not met.

Specific target organ toxicity — repeated exposure Mixture: Based upon the available data, the classification criteria are not met.

Mixture: Based upon the available data, the classification criteria are not met.

12. Ecological information

Aspiration hazard

Ecotoxicology Mixture: Based upon the available data, the classification criteria are not met.

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

Low bioaccumulation potential.

Mobility in soil The product is predicted to have low mobility in soil. Insoluble in water

Other adverse effects Not classified as PBT or vPvB.

None Known.

13. Disposal considerations

Disposal method Disposal should be in accordance with local, state or national legislation.

Disposal precaution Dispose of empty containers and wastes safely. Dispose of this container to hazardous or

special waste collection point.

14. Transport information

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

ADR/RID **IMDG** ICAO/IATA **UN** number None assigned None assigned None assigned **UN proper shipping name** None assigned None assigned None assigned Transport hazard class(es) None assigned None assigned None assigned Packing group None assigned None assigned None assigned Marine pollutant Not classified Not classified as a Marine Not classified

Pollutant

Special precaution that a user should be aware of or None Known

should comply with in connection with transport or conveyance either within or outside the premises:

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15. REGULATORY INFORMATION

Industrial Safety and Health Act

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Hazardous Substances Subject to Control Substances Requiring Work Environment Measurement Harmful Substances Requiring Special Medical

Examination

All chemicals are not listed All chemicals are not listed All chemicals are not listed

Korea Existing Chemicals Inventory (KECI) Glass oxide: listed

Toxic Chemical Control Act

Toxic Substances All chemicals are not listed Substances Requiring Preparation for Accidents All chemicals are not listed

Dangerous Material Safety Control ActAll chemicals are not listedWaste Management ActAll chemicals are not listed

Other requirements in domestic and other countries

Europe: Restrictions on use

All chemicals are not listed
Europe: RoHS – EEE Substance Inventory

Europe: Wassergefährdungsklasse (Germany)

All chemicals are not listed

United States (TSCA) Glass oxide: listed

IARC Monographs Note Q fibres - IARC classification: Group 3

16. Other information

The following sections contain revisions or new statements: V2.1 - New Template

References:

Existing Safety Data Sheet (SDS)

Existing ECHA registration for Glass, oxide, chemicals (CAS No. 65997-17-3). Mandatory classification by National Institute of Environmental Research (NIER)

The CAS number under which the Note Q fibres fall is 65997-17-3. Under this number the fibres are registered in the chemical registry systems in most countries in the world. This CAS number however is very broad. The specific chemistry of the bio-soluble fibre has been laid down in the CAS number 287922-11-6 and 1010446-98-6 and can be tracked in the CAS Registry System only.

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Classification: This Safety Data Sheet(s) was prepared in accordance with Notice No. 2016-19 of the Ministry of Employment and Labor

Legend

ATE Acute Toxicity Estimate
BCF Bioconcentration Factor

CAS CAS: Chemical Abstracts Service

DNEL Derived no effect level
EC EC: European Community
EN European Standard
EU European Union

IATA IATA: International Air Transport Association

ICAO/IATA ICAO: International Civil Aviation Organization / IATA: International Air Transport Association

IMDG IMDG: International Maritime Dangerous Goods

LC50 Lethal concentration 50 LD50 Lethal dose 50

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LTEL Long term exposure limit

OECD Organisation for Economic Cooperation and Development

PBT PBT: Persistent, Bioaccumulative and Toxic

PNEC Predicted No Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL Short term exposure limit TWA Time Weighted Average

UN United Nations

vPvB very Persistent and very Bioaccumulative

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