

SAFETY DATA SHEET



Company: Rockwool B.V. - Grodan	
Trade name: Growth substrate based on mineral wool	Product name: Grodan
Revised on: 21-09-11	Replaces issue: 11 August 1999

1 Product and company identification

Material name	Mineral fibres according to Note Q
Revision date	21 September 2011
Version #	01
Cas #	Generic: 65997-A-3 / Specific: 28 7922-11-6
Product code	Roxul®1000, RIF41001, HT, MMVF34
Product use	Growth substrate material based on stone wool, high-alumina, low-silica (HT) wool.
Company name	Rockwool B.V. Grodan Industrieweg 15 6045 JG Roermond The Netherlands P.O. Box 1160 6040 KD Roermond The Netherlands T +31 475 35 30 20 F +31 475 35 37 16 E-mail: info@grodan.nl

Further information If further information is required, please call or fax or e-mail Grodan:
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2 Hazards identification

Physical state	Solid.
Appearance	Solid, Grey-green and brown
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	Generic: 65997-A-3 Specific: 28 7922-11-6	95-100

Composition comments	REACH Registration number: 01-2119472313-44-0003. Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (NA ₂ O +K ₂ O + CaO + MgO + BaO) content greater than 18% by weight and fulfilling one of the Note Q conditions.
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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. Seek 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. Seek medical attention if irritation persists after washing.
- **Inhalation** Move injured person into fresh air and keep person calm and under observation. Seek medical attention if any discomfort occurs.
- **Ingestion** Clean mouth with water and drink plenty of water afterwards. Seek 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 fire fighters

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 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

Personal precautions 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.

Environmental precautions Collect and dispose of spillage as indicated in Section 13 of the SDS.

Methods for containment Collect spillage.

Methods for cleaning up 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.

Other information Clean up in accordance with all applicable regulations.

7 Handling and storage

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.

Storage Store in a dry place. Store in original packaging.

8 Exposure controls and personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Engineering controls Minimize dust generation and accumulation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Personal protective equipment

- **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 composition

-	Appearance	Solid, Grey-green and brown.
-	Color	Grey-green and brown.
-	Odor	Not applicable.
-	Odor threshold	Not available.
-	Physical state	Solid.
-	Form	Loose fibres.
-	pH	Not applicable.
-	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 Stability and reactivity

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

11 Toxicological information

Acute effects	May cause mechanical irritation of skin and eyes. Dust may irritate respiratory system.
Sensitization	None known.
Chronic effects	None known.
Carcinogenicity	IARC classified rock (stone) wool in Group 3 – not classifiable as to its carcinogenicity to humans. Newer materials (Nota Q fibres) are found to be non-carcinogenic.
Epidemiology	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.
Mutagenicity	None known.
Reproductive effects	None known.
Symptoms and target organs	Dust may irritate the eyes and the respiratory system.

12 Ecological information

Eco toxicity	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.
Persistence and degradability	Not known.
Bioaccumulation/Accumulation	No data available.
Partition coefficient (n-octanol/water)	No data available.
Mobility in environmental media	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

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

14 Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
TDG	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)

- Hazard categories	Immediate Hazard - No Delayed Hazard - No
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- 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 Further 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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