



SAFETY DATA SHEET: SD/S13

in accordance with 91/155/EC and § 14 Regulation on Dangerous Substances (GefStoffV).
Revised on 05.02.2003

1. Identification of the substance /preparation and of the company

Information on the product

The safety data sheet is valid for the following products:

Trade names

LAMELLE	Mineral fibre insulation boards
volamit®	Pre-coated mineral fibre lamellar board
WOLLE	Mineral fibre insulation panels
BAR FIXING SYSTEM mineral fibre insulation panels	
Reveal boards mineral fibre	

Information on the manufacturer / supplier

Manufacturer/Supplier:	KNAUF MARMORIT GmbH
Street/PO Box:	Ellighofen 6
Country code/Postcode/Town:	D-79283 Bollschweil
Telephone:	(0 76 33) 8 10-0
Fax:	(0 76 33) 8 10-113
Contact for information:	Quality control
Telephone:	(0 76 33) 8 10-142
Emergency information:	Advice Centre for Symptoms of Poisoning and Embryo Toxicology, Berlin
Emergency number:	(0 30) 1 92 40

2. Composition/information on ingredients

Chemical characterization:

Description:

Glassy solidified smelt in processed state (stone wool product) with the addition of duroplastic synthetic resins and small quantities of mineral oil and, if required, adhesion promoters.

Dangerous components:

During processing, fibre dusts (definition under Technical Rules for Hazardous Substances TRGS 521) may be released which must be classified as irritating to skin in accordance with Appendix 1 of Guideline 67/548/EC.

On the other hand, according to Note Q of Appendix 1 of Directive 67/548/EC in the version of the 23rd change 97/69/EC of the EU Commission of 5.12.1997, our stone wool fibre must be classified as neither carcinogenic, category 2, nor potentially carcinogenic, category 3, because of its high bio-solubility (demonstrated half-life for the long fibre fraction of clearly less than 20 days in intratracheal test; limit value: 40 days).

In addition, according to a test certificate from the Fraunhofer Institute, with a half life for the WHO fibre fraction calculated in an intratracheal test of less than 30 days, the fibre meets the release criterion of Annex V no. 7 (1) no. 2 of the Hazardous Goods Ordinance (GefStoffV) (limit value up to 30.09.2000: 65 days, from 1.10.2000: 40 days), so that the special protective measures at work of Annex V no. 7 GefStoffV do not apply for handling stone wool produced by us.

Other information: -

3. Hazards identification

Hazards for humans and the environment:

R38 Irritating to skin

Other information: n/a

4. First aid measures

After skin contact:

Consult a physician if irritation is evident.

After contact with eyes:

Particles that have entered the eye should be removed like other foreign bodies: flush out thoroughly with water, consult physician if required.

After swallowing: n/a

After inhalation: n/a

Notes for the physician: -

Additional information: -

5. Fire-fighting measures

Suitable extinguishing agents: n/a

Extinguishing agents which must not be used for safety reasons: n/a

Hazard caused by combustion or decomposition products: n/a

Special protective equipment for fire-fighters: n/a

Other instructions: -

6. Accidental release measures

Personal precautions: n/a

Measures for cleaning up spillages or leaks: n/a

Environmental precautions: n/a

Other instructions: -

7. Handling and storage

Handling

Instructions for safe handling:

TRGS 521, section 5:

- (1) Coarser fibres and fibre fragments can result in mechanical effects on the eyes, upper respiratory tract and skin. To avoid such temporary, reversible effects, the general basic principles of work hygiene must be observed, as in the handling of non-fibrous dusts. These principles apply both to fibre dusts as defined in number 2.3 of TRGS 905 and to non-classified fibre dusts or fibres with a diameter of $> \mu\text{m}$.
- (2) When handling products that can release fibres or fibre dusts, the soiling of work areas is to be minimized as far as possible. This can be achieved, for instance, by
 - the application of low-dust processing methods and devices in accordance with number 3.3, paragraphs 1 and 2,
 - the use of prefabricated products,
 - the careful handling of products and waste pieces,
 - regular cleaning of the work areas

- or
- ventilation and air conditioning measures at the workplace.
- (3) Further general principles of work hygiene are:
- the wearing of loose-fitting, closed work clothing and, if appropriate, suitable gloves,
 - the use of suitable protective creams or lotions in cases of sensitive skin,
 - the wearing of suitable protective glasses or goggles in cases of heavy dust generation or overhead work. The use of half and quarter masks with P1 filter or particle-filtering half masks FFP1 is recommended. In other cases as well, half and quarter mask with P1 filter or particle-filtering half masks FFP1 are to be provided at the request of the employee.
 - Washing off dust after the end of the work.

Information on protection against fire and explosion:
Product is non-flammable (DIN 4102)

Storage

Storage conditions:
Store in a dry place, protect from rain and humidity.

Instructions on mixed storage: n/a
Storage class: n/a
Other instructions: -

8. Exposure control and personal protection

Limit values:

The general dust limit value is a fine dust concentration of 6 mg/m^3 .
For fibre dusts not classified as carcinogenic (see 2.6), TRGS 900 does not stipulate compliance with a particular air limit value (TRK value).

Personal protection

Breathing protection:
In cases of high dust levels, the wearing of dust masks P1 or P2 is recommended.

Hand protection:
Gloves

Eye protection:
Protective glasses or goggles should be worn in cases of heavy dust generation.

Skin protection:
Wear loose fitting, closed protective clothing. Use protective creams in cases of sensitive skin.

Hygiene measures:
Remove construction dust with water, shower if required.

Other information:
When insulating materials are exposed to temperatures above 200°C , the binding agent evaporates, so that the fibres are no longer bound. In this case the insulating materials should be collected in suitable containers directly underneath the installation point to avoid excessive dust generation. A breathing mask should always be worn during this.

9. Physical and chemical properties

(Details of determination method with value and unit in accordance with Directive 67/548/EC)

Appearance

Form: tightly bound boards (solid)
Colour: olive green
Odour: -

Safety data

- Change in condition: n/a
- Melting point/
melting range: > 1000°C
- Boiling point/boiling range: n/a
- Flash point:
- Flammability: non-flammable (class A1)
in accordance with DIN 4102
- Ignition temperature:
- Auto ignition: n/a
- Fire advancing properties:
- Explosion hazards: n/a
- Explosion limits
(lower / upper): n/a
- Vapour pressure at 25°C:
- Bulk density at 25°C: 25-250 kg/m³
- Solubility: n/a
- Solubility in water: n/a
- Solubility in fat: n/a
- Distribution coefficient: n/a
- pH value
at 1000g/litre H₂O, 25°C: 7 – 8
- Solvent content: n/a
- Solvent separation test: n/a
- Viscosity: n/a
- Further particulars: n/a

10. Stability and reactivity

Thermal decomposition:
At temperatures above 200°C, binding agent is released

Hazardous reactions: n/a

Hazardous decomposition products: n/a

Other instructions: -

11. Toxicological information

Acute toxicity (LD50/LC 50 values):
Test of toxic harmlessness in accordance with DIN 53436 within the scope of certification and quality assurance in accordance with DIN 4102 Part 1.

Sensitization: n/a

Irritant and corrosive effect: Irritates the skin

Effects after prolonged exposure: n/a

Carcinogenic, mutagenic effects and effects hazardous to reproduction:
None (see 2.6)

Empirical data on effects on humans:

Observations relevant to classifications: n/a

Other observations:
Mechanical effect of fibre debris on skin, eyes and mucous membranes.

Further particulars:

12. Ecological information

Environmental hazard classification
in accordance with hazard symbol "N": n/a

Information on elimination: n/a

Ecotoxic effects (e.g. behaviour in sewage plants): n/a

Additional information
on ecology: n/a

CSB value: n/a

BSB value: n/a

AOX value: n/a

Further particulars: -

13. Disposal instructions

Product

- Waste code number: 17 06 04
- Waste description: insulation materials other than those mentioned in 17 06 01 and 17 06 03
- Accountability: no
- Recommendation on packaging disposal: Interseroh contract

Further particulars: -

14. Information on Transport

Land carriage ADR/RID and GGVs/GGVE

Class: n/a
Figure/letter: n/a
UN number: n/a
Designation of goods: Stone wool insulating materials

Sea transport IMDG/GGV sea:

Packaging group: n/a
EMS no.: n/a
MFAG: n/a
Marine pollutant: n/a
Proper shipping name: n/a

Air transport ICAO-TI and IATA-DGR:

Class: n/a
UN/ID number: n/a
Packaging group: n/a
Correct technical name: n/a

Further particulars: -

15. Regulatory information

Labelling in accordance with EC Guideline 91/155 EC and GefStoffV:
n/a.

- R categories: R38
- S categories: S (2) 36/37
- Special marking of particular preparations: n/a
- National regulations: n/a
- Information on restrictions of employment: n/a
- Instructions in case of interference: n/a
- Classification acc. VbF: n/a
- Technical instruction air: n/a
- Water pollution class
(if necessary self assessment): WGK 0
- Restrictions and legislation: n/a
- Other regulations: -

16. Other information

Training particulars: n/a

Information sources:

- Annex 1 of directive 67/548/EC in the version of Directive 97/69/EC of the Commission of 5.12.1997
- Annex V No. 7 of GefStoffv
- TRGS 521
- BIA Report 2/98
- BIA / BG recommendations (BIA folder)
- Instructions for handling (Construction engineering and technical insulation)

n/a = not applicable

Department issuing data sheet: Quality control

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