

**MATERIAL SAFETY SHEET
MINERAL WOOL INSULATION**

(In accordance with 91/155 EC)

Envirowall Limited – Keighley – West Yorkshire - BD21 3DU

Issue Date: 18th January 2004

Authorised By: M. A. Gee

Trade name: Rockwool

Product name: Rockwool stone wool insulation products (CAS number 287922-11-6)

1 Chemical product and company identification

1.1 Generic product name: Insulation material consisting of stone wool based mineral fibres [man-made vitreous (silicate) fibres].

1.2 Company address: ROCKWOOL Limited
Pencoed Bridgend CF35 6NY

1.3 If further information is required, please telephone or fax ROCKWOOL Limited. Tel: 01656 862 621 Fax: 01656 862 302

2 Composition/ information on ingredients

Inert vitreous silicate mineral wool with a small amount of urea modified phenolic-based resin binder that has been cured into bakelite and up to 0.3% mineral oil or up to 0.5% silicone oil or emulsion.

3 Hazards identification

3.1 Mineral fibres: ROCKWOOL mineral fibres have been classified by EU and HSE 'CHIP' Regulations as Irritant and may cause transient mechanical skin irritation. High dust levels may irritate the throat and eyes.

4 First-aid measures

4.1 Mineral fibres

Skin: If irritation occurs, wash off under cold running water prior to washing with mild soap. Do not rub or scratch.

Throat: If irritation occurs, clean throat by rinsing with cold, potable water.

Eyes: If irritation occurs, flush eyes with potable cold water. Do not rub the eyes.

Consult a physician if irritation persists.

4.2 Binder gasses

If eye or respiratory irritation occurs, leave source of contamination and get fresh air. Consult a physician if irritation persists.

5 Fire-fighting measures

The products are non-combustible and do not pose a fire hazard. Puncting may occur at high temperatures.

Some facings and packaging materials may burn.

5.1 Suitable extinguishing media: Water, foam, carbon dioxide or dry powder.

5.2 Extinguishing media that 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 procedures.

6 Accidental release measures

No special measures required.

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.

7.2 Storage: Keep material in original packaging until it is to be used. Store material to protect against damage including the weather.

Table 1

CAS-No. Contents Classification R-phrases

Man-made vitreous (silicate)

fibres, note Q.

287922-11-6 90-99% Xi Irritating to skin (R:38)

8 Exposure controls/ personal protection

8.1 Respiratory protection

Fibres: Maximum exposure limit (MEL) 5mg/m³, 8 hour time weighted average gravimetric measure. If the MEL is likely to be

exceeded (for example when using high speed cutting tools or when working in confined spaces) disposable face masks complying with BS EN149 FFP1 or FFP2 should be used and are suitable for most applications.

Initial heating up: When insulation wool is heated to approximately 200°C for the first time(s), release of binder components and binder decomposition products occurs. The fumes can be detected by their acrid odour and high concentrations of these gasses may irritate the eyes and respiratory system. In general, decomposition products from pyrolysis or burning of organic material can cause respiratory sensitisation. There are no recorded incidents of respiratory sensitisation from gasses released from Rockwool Limited products. However, general dilution ventilation and/or local exhaust ventilation should be provided as necessary to control exposure to fumes when high temperature appliances are first put into service.

8.2 Hand protection: Not normally required but suitable gloves can be worn.

8.3 Eye protection: With heavy dust development or when working with product above head height, the use of safety goggles is advised.

Skin protection: No special requirements: loose fitting, long-sleeved, long-legged, work clothes advised. Change clothes and wash on completing work.

9 Physical and chemical properties

9.1 Appearance: solid, green-brown

9.2 Odour: n.a.

9.3 pH (at 1000g/H₂O, 25°C): neutral or slightly alkaline (pH7-9)

9.4 Boiling point: n.a.



MATERIAL SAFETY SHEET MINERAL WOOL INSULATION

(In accordance with 91/155 EC)

Envirowall Limited – Keighley – West Yorkshire - BD21 3DU

Issue Date: 18th January 2004

Authorised By: M. A. Gee

9.5 Melting point: above 1000°C. The limiting temperature applicable for use is dependent upon specific product type and intended application and must be taken from the appropriate ROCKWOOL product data sheet.

9.6 Flash point:)

9.7 Flammability:)

9.8 Auto-flammability:) non combustible ISO 1182

9.9 Explosive properties:)

9.10 Explosive properties: n.a.

9.11 Oxidising properties: n.a.

9.12 Vapour pressure: n.a.

9.13 Fibre density: n.a.

9.14 Solubility: generally chemically inert and insoluble in water

9.15 Partition coefficient: n.a.

9.16 Other data: n.a.

10 Stability and reactivity information

10.1 Stability: Stable

10.2 Reactivity: Not reactive

10.3 Thermal decomposition products: When insulation wool is heated to approximately 200°C for the first time(s) binder components and decomposition gases are emitted from the binder. The decomposition starts at approximately 200°C and the duration of release depends on thickness of insulation, binder content and temperature(s) applied.

Toxicological information

11.1 Carcinogenic, mutagenic and reproductive toxic effects: NONE. Human epidemiological studies show no link between exposure to mineral wool fibres and lung disease or any other chronic effects. Owing to their high bio-solubility, the fibre types of ROCKWOOL stone wool insulation materials are assessed as free from suspicion of carcinogenic effects in accordance with EU Directive 97/69/EC (Note Q). This Directive is incorporated into UK health and safety legislation through The Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 1998 - known as CHIP.

11.2 In October 2001, the International Agency for Research on Cancer ("IARC", part of the World Health Organisation) reviewed its 1987 classification of mineral wool fibres and removed them from its list of possible carcinogens, reflecting the increase in scientific knowledge and the established safety of mineral wool for workers and building occupiers. IARC scientists gave mineral wool insulation, formerly Group 2B (possibly carcinogenic to humans), a Group 3 classification (unclassifiable as to its carcinogenicity in humans). IARC originally placed mineral wool in Group 2B, a classification that included 235 substances, such as carbon black, coffee, urethane, pickled vegetables,

gasoline, and dry cleaning fluid. Its re-evaluation in October 2001 puts mineral wool in the lesser Group 3 category, a classification that includes 483 substances such as tea, caffeine, saccharin, fluorescent lighting, and hair colouring products.

11.3 Other observations: In the case of coarser fibres, there can be physical effects on skin, upper respiratory system (mucous membranes) and eyes that can cause temporary, self-fading effects (eg itching). No chemical effects ensue.

12 Ecological information

Stable product with no known adverse environmental effects.

13 Disposal considerations

No special precautions. ROCKWOOL products are not classified as special waste under the Special Waste Regulations.

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 - Xi, Irritant.

Risk Phrases - Irritating to skin (R:38). Safety Phrases - Wear suitable protective clothing and gloves (S36/37). ROCKWOOL mineral wool is exonerated from classification as a carcinogen according to Note Q in EU Directive 97/69/EC.

15.2 Other Regulation: n.a.

15.3 Exposure Limits: Recommended maximum exposure limit (MEL) 5 mg/m³, 8 hour time weighted average gravimetric measure.

16 Further information

Health and Safety Executive Guidance Note EH46 – Man-Made Mineral Fibres
Health and Safety Executive Guidance Note EH40 – Occupational Exposure Limits
Health and Safety Commission 'The Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations' - 'CHIP'
Eurisol Health Statement

This information reflects typical values and is not a product specification. No warranty expressed or implied is hereby made.

This materials safety data sheet does not constitute an assessment of workplace risk.

