

MATERIAL SAFETY DATA SHEET

1 Product and company identification

- 1.1 Product name:** Rockwool Insulation
1.2 Product use: Thermal insulation, acoustic insulation, fire protection.
1.3 Product appearance: Grey/green color. Supplied in Slabs, rolls, mats, loose 'granulate' and shaped (eg performed pipe sections, cut pipe sections etc.)
1.4 Company address: Tungkin Industry Co., Ltd
 B1-02 Hardware and Electronic Wholesales Center Xihu Shilong Dongguan
 Guangdong China
1.5 Contact: Tel: +86 769 86185838, Fax: +86 769 86180671
1.6 E-mail of person responsible for MSDS: insulationtk@gmail.com
1.7 Issue date: 8th June 2014

2 Hazards identification

- 2.1 Hazards:** The mechanical effect of fibres in contact with the skin can cause a temporary itching. Acrid smoke may be generated during a fire.

3 Composition/information on ingredients

Description	CAS-No.	Contents
Mineral wool – Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MaO+BaO) content greater than 18% by weight	RN 65997-17-3	95-99%
Bakelite synthetic thermosetting resin binder	-	Up to 5%
Mineral oil (for water repellency)	-	Up to 0.3%

4 First-aid measures

4.1 Information according to different exposure route:

- **Inhalation:** Remove from exposure. Rinse the throat and blow nose to clear dust.
- **Skin contact:** If itching occurs, remove contaminated clothing and wash skin gently with cold water and soap.
- **Eyes contact:** Rinse abundantly with water for at least 15 minutes.
- **Ingestion:** Drink plenty of water if accidentally ingested.

If any adverse reaction or discomfort continues form any of the above exposures, seek medical professional advice.

4.2 Binder Gases

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 hazards. Pinking 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 gases.
- 5.4 **Special protective equipment for the fighters:** Observe normal fire fighting procedures.

6 Accidental release measures

- 6.1 **Personal precautions:** In case of presence of high concentrations of dust, use the same protective equipment as mentioned in section 8.
- 6.2 **Environmental protection:** Not relevant
- 6.3 **Methods of cleaning up:** Clean with vacuum or dampen with water spray prior to sweeping up.

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 it is to be used. Store material to protect against damage including the weather.

8 Exposure controls/personal protection

8.1 Respiratory protection

Fibres: Workplace exposure limit (WEL) to meet country's requirements on the 8 hour time weighted average gravimetric measure. If the WEL 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 gases may irritate the eyes and respiratory system. 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:** It is recommended that gloves are worn for comfort. Gloves conforming to EN 388 or similar are recommended.
- 8.3 **Eye protection:** With heavy dust development or when working with product above head height, the use of safety goggles is advised. Eye protection conforming to EN 166 or similar are recommended.
- 8.4 **Skin protection:** No special requirements: loose fitting, long-legged, work clothes advised. Change clothes and wash on completing work.

9 Physical and chemical properties

- 9.1 **Appearance:** solid, grey-green
- 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.
- 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 data sheet.
- 9.6 **Flash point:** n.a.
- 9.7 **Flammability:** n.a.
- 9.8 **Auto-flammability:** A1 non combustible
- 9.9 **Explosive properties:** n.a.

- 9.10 **Oxidising properties:** n.a.
- 9.11 **Vapour pressure:** n.a.
- 9.12 **Fibre density:** n.a.
- 9.13 **Solubility:** generally chemically inert and insoluble in water

10 Stability and reactivity

- 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.

11 Toxicological information

- 11.1 **Acute effect:** The mechanical effect of fibres in contact with the skin can cause a temporary itching.
- 11.2 **Respirable fibres:** According to IARC rock (stone) wool is classified as Group 3, “not classifiable as to its carcinogenicity to humans”. (In October 2001, the International Agency for Research on Cancer “IARC”, part of the World Health Organization reviewed its 1987 classification of mineral wool fibres and removed them from the list of carcinogens).

12 Ecological information:

Stable product with no known adverse environment effects.

13 Disposal considerations:

No special precautions

- 13.1 **Hazardous waste regulations;** Our insulation is classified as non-hazardous waste. Dispose according to local regulations.
- 13.2 **Landfill regulations:** Tungkin insulation waste is categorized as “waste accepted at landfills for non-hazardous waste”.

14 Transport information

- 14.1 Not regulated by any transport mode. No special precautions.

15 Regulatory information

- 15.1 According to IARC rock (stone) wool is classified as Group 3, “not classifiable as to its carcinogenicity to humans”. (In October 2001, the International Agency for Research on Cancer “IARC”, part of the World Health Organization reviewed its 1987 classification of mineral wool fibres and removed them from the list of possible carcinogens).
- 15.2 **Exposure Limits:** Recommended Workplace exposure limit (WEL) to meet country’s requirements on the 8 hours time weighted average gravimetric measure.

16 Further information

- 16.1 **Potential Health Effects:** IARC Monograph Man-made Vitreous Fibres, press release October 2001 Safety in the Use of Mineral and Synthetic Fibres, Occupational Safety and Health Series. International Labor Office (ILO).
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