

MATERIAL SAFETY DATA SHEET

Section 1 Product Details and Company Identification

Product Name: Isowool Stone Wool

Recommended use: Thermal and Acoustic Insulation, fire protection insulation.

Company address: China Iking Industrial Group Co., Ltd.

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Important Note: This Material Safety Data Sheet (MSDS) is issued by the Supplier

in accordance with Occupational Sa fety and Health Act 1994 (Classification, Packaging and Labelling of Hazardous Chemicals) Regulation 1997. As such, the information in it must not be altered, deleted or added to. The Supplier will issue a new MSDS when there is a change in product specifications and/or regulations. The Supplier will not accept any responsibility for any changes made to

its MSDS by any other person or organisation.

Chemical Name:	Proportion:	CAS Number:
Fiberised mineral wool (rockwool)	95%	-
Heat-cured resin	<5%	25104-55-6
Mineral oil (Solvent refined)	<2%	-

Other properties:

Fibres and particles are amo rphous (no n-crystalline) and FBS-1 is b iosoluble. The resin and solvent refined mineral oils bind the fibres and particles together and minimise the release of dusts. The cured resin is stab le and will remain i ntact for the life of t he product under normal atmospheric conditions.



Section 3

Hazard Identification

Rockwool insulation is classified as non-hazardous during installation and in long-term use.

Health Effects

The product, once installed, does not release dust or fibres, and does not cause any health effects. Handling, in stalling, or removing the product may result in dust exposure with the following effects:

Acute:

- **Swallowed:** U nlikely u nder normal conditions of use, but may cause i rritation of the lips, mouth and throat.
- Eye: Bonded rockwool dust, if it gets into the eyes may cause discomfort with watering and redness.
- **Skin:** may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.
- Inhaled: excessive amounts of dust from the product may cause discomfort of the nose (congestion and run ny nose), th roat and respiratory tract, especially in those suffering from upper respiratory or chest complaints such as hay fever asthma or bronchitis.

Chronic:

There a re no long term heal the ffects. FB S-1 fibre is biosoluble. This product type has been assessed by the International Agency for Research on Cancer (IARC) and is consider "not classifiable as to carcinogenicity to humans" (Group 3)

Section 4

First-aid Measures

Swallowed: Rinse the lips and mouth with water, give water to drink. If symptoms persist seek medical attention.

Eye: Flush with copious amounts of water. If symptoms persist, seek medical attention.

Skin: Sluice with water and wash with soap and water. If itching persists, seek medical attention.

Inhaled: Remove to fresh air. If symptoms persist, seek medical attention.

Notes to doctor: This product can be slightly irritating to the skin. Irritation usually lasts only a few ho urs. Treat ment should be di rected toward rem oving the source o f irritation wi th symptomatic treatment as necessary. Any other symptoms and signs of ill health are likely to be due to other causes.

Section 5

Fire-Fighting Measure

Specific Hazards: non-flammable. No fire or explosion hazard exists.

Extinguishing Media: Use water or dry powder to cool intact containers and nearby storage areas. However, facing materials may burn.

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Fire Fighting Procedures: Product will not burn. General fire conditions and other materials in a fire will determine what fire-fighting measures and protection are required. If product is present in a fi re, s ome sm oke and t oxic gases m ay be ev olved. Evacuate area and c ontact em ergency services. Remain upwind and notify those downwind of hazard. Wear protective equipment when combating fire.

Hazardous Decomp osition Prod ucts: R esin bi nders and facings may decompose, s moulder or burn in fire situation or if heated over 300 C.

Section 6

Accidental Release Measures

If product is to rn or loose, reseal and minimise fibre release. Personnel directly involved in clean up should wear protective equipment as des cribed in Section 8 to prevent skin and eye irritation. Clean area to avoid dispersion of a ny i rritant fi bres u sing wet s weep methods or use vac uum cleaner. Re use where possible or place in a seala ble plastic bag for disposal acc ording to local authority guidelines

Section 7

Handling and Storage

Handling: Handling, installing or removing the product may result in some dust and airborne fibre; minimise eye or skin c ontact and i nhalation during handling, i nstallation and removal. Work practices should aim to minimise the release of, and exposure to, fibres and/or dust. Provide good ventilation. Work area s s hould be cleaned re gularly and vacuuming or wet s weeping is recommended.

Storage: Store in sealed container in cool, dry area, removed from foodstuffs. En sure packages are a dequately labelled, protected from physical damage, and sealed when not in use. Avoid packaging being stored under UV light (direct sunlight) for long periods.

Section 8

Exposure Controls / Personal Protection

Applicable Regulations: Use and Standard of Exposure Chemicals Hazardous To Health Regulation 2000 (USECHH 2000)

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN (PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

Exposures: observe relevant Permissible Exposure Limits as in Regulations

Eye Protection: When handling overhead or in enclosed or poorly ventilated areas eye contact with dust or fibre can be avoided by wearing ventilated non-fogging dust resistant goggles.

Skin Protection: Direct skin contact can be minimised by wearing normal work clothing (long sleeve & long legged), a cap or hat, and gloves. Work clothes should be washed regularly and separately from other clothes.

Respiratory Protection: When handling insulation, particularly during work in enclosed or poorly ventilated areas, wear an approved dust particulate respirator. Use only approved respirators fitted and maintained correctly, and kept in clean storage when not in use. In high-



temperature installations, in poorly ventilated areas at high temperatures, use air-supplied respirators or self-contained breathing apparatus during the first heat-up cycle.

Personal Hygiene: Washing of ex posed skin with so ap and water at the en d of a sh ift or as required is recommended. Observe good personal hygiene including washing hands before eating. Remove protective equipment before entering eating areas.

Section 9	Physical And Chemical Properties

Appearance:	A matt of brown or greyish fibrous material resembling wool. It is supplied in different shapes and sizes wrapped in plastic. It may be rigid or flexible. Facings such as aluminium foil, calico, wire, and synthetic tissues are applied to meet specific purposes.
Odour:	Usually odourless but may have faint amine odour
pH:	7 - 9
Boiling Point:	Not applicable
Melting Point:	>1000 ℃
Vapour pressure:	Not applicable
Density	40 – 200 kg/m3
Solubility in water:	Not applicable
Evaporation Rate:	Not applicable
Vapour Density:	Not applicable
Percent volatiles:	Very low; <1%
Flash Point:	Not applicable
Decomposition Temperature (Resin):	>300 ℃
Upper/Lower Explosive Limits (LEL/UEL):	Not applicable

Section 10 Stability And Reactivity

Chemical Stability:	Stable, however resin binders may be attacked by acidic,
	alkaline or solvent based substances. The cured resin is
	stable and will remain intact for the life of the product under
	normal atmospheric conditions.
Hazardous Polymerisation:	None known
Conditions to avoid:	None known
Hazardous Decomposition	When heated >177°C, resin starts to decompose. Product
products:	designed for high temperature applications (above 300
	degrees Celsius), may release small amounts of gases (CO2,
	formaldehyde, amines) irritating to eyes, nose and throat
	during initial heat up.

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Section 11

Toxicological Information

Toxicity Data

Specific toxicity information for these products is not available, but consideration of the ingredients indicates a very low toxicity with LD50 >5000mg/Kg

Acute Effects:

- Swallowed: Unlikely under normal conditions of use, but would result in irritation of the
 mouth and throat.
- Eye: If dust gets into the eyes, may cause eye discomfort resulting in watering and redness.
- **Skin:** Dust may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.
- Inhaled: The du st m ay cau se discomfort of the no se, the roat and resp iratory tract, especially in those suffering from upper respiratory or chest complaints such as hay fever asthma or bronchitis. Products designed for high temperature applications (above 177 °C) may release small amounts of gases (CO₂, formaldehyde, amines) from the resin bonding during the initial heat-up cycle, which are irritating to the eyes, nose and throat.

Chronic:

There are no known chronic health effects from use or handling of these products. According to IARC (International Agency for Research on Cancer) rockwool is classified as Group 3 "not classifiable as to carcinogenicity to humans".

Section 12

Ecological Information

Neither the raw materials used nor the finished product contain any ozone depleting chemicals. This product is not classified as a haza rdous air pollutant. B inder-coated rockwool is hydrophobic, and no adverse environmental effects would be expected if accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

Section 13

Disposal Consideration

Waste, or off cuts should be bagged up and disposed of at an approved landfill site in accordance with local authority guidelines.

Section 14

Transportation Information

No special transport requirements are necessary.

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