



MATERIAL SAFETY DATA SHEET ROCKWOOL

1. IDENTIFICATION

PRODUCT NAME : ROCKWOOL

2. MANUFACTURER

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3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>MATERIALS</u>	<u>CAS NUMBER</u>	<u>PROPORTION</u>
FIBERISED MINERAL WOOL(ROCKWOOL):	-	> 90%
HEAT CURE RESIN	: 25104-55-6	< 5%
MINERAL OIL (SOLVENT REFINED)	: -	<2%

Other properties:

Fibres and particles are amorphous (non-crystalline) and FBS-1 is biosoluble. The resin and solvent refined mineral oils bind the fibres and particles together and minimise the release of dusts. The cured resin is stable and will remain intact for the life of the product under normal atmospheric conditions.

4. HAZARDS IDENTIFICATION

Bonded 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, installing, or removing the product may result in dust exposure with the following effects:



Acute:

- Swallowed : Unlikely under normal conditions of use, but may cause irritation of the lips, mouth and throat.
- Eye Protection : Bonded rockwool dust, if it gets into the eyes may cause discomfort with watering and redness.
- Hand Protection : May irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.
- Inhalation : Excessive amounts of dust from the product may cause discomfort of the nose (congestion and runny nose), throat and respiratory tract, especially in those suffering from upper respiratory or chest complaints such as hay fever asthma or bronchitis.

Chronic:

There are no long term health effects.

5. FIRST AID MEASURES

- Skin Contact : Sluice with water and wash with soap and water. If itching persists, seek medical attention.
- Eye Contact : Flush with copious amounts of water. If symptoms persist, seek medical attention.
- Inhalation : Remove to fresh air. If symptoms persist, seek medical attention.
- Swallowed : Rinse the lips and mouth with water, give water to drink. If symptoms persist seek medical attention.

Notes to doctor: This product can be slightly irritating to the skin. Irritation usually lasts only a few hours. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary. Any other symptoms and signs of ill health are likely to be due to other causes.

6. FIRE FIGHTING MEASURES

- 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.

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 fire, some smoke and toxic gases may be evolved. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear protective equipment when combating fire.

Hazardous Decomposition Products : Resin binders and facings may decompose, smoulder or burn in fire situation or if heated over 300 C.

7. ACCIDENTAL RELEASE MEASURES

If product is torn or loose, reseal and minimise fibre release. Personnel directly involved in clean up should wear protective equipment as described in Section 8 to prevent skin and eye irritation. Clean area to avoid dispersion of any irritant fibres using wet sweep methods or use vacuum cleaner. Reuse where possible or place in a sealable plastic bag for disposal according to local authority guidelines

8. HANDLING AND STORAGE

Handling : Handling, installing or removing the product may result in some dust and airborne fibre; minimise eye or skin contact and inhalation during handling, installation and removal. Work practices should aim to minimise the release of, and exposure to, fibres and/or dust. Provide good ventilation. Work areas should be cleaned regularly and vacuuming or wet sweeping is recommended.

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

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 exposed skin with soap and water at the end of a shift or as required is recommended. Observe good personal hygiene including washing hands before eating. Remove protective equipment before entering eating areas.

10. 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°C

Vapour pressure : Not applicable

Density : 40 – 150 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°C

Upper/Lower Explosive Limits (LEL/UEL) : Not applicable

11. 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 Products : When heated >177°C, resin starts to decompose. Product 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.



12. 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:

- Swallowed : Unlikely under normal conditions of use, but would result in irritation of the mouth and throat.
- Eye Protection : If dust gets into the eyes may cause discomfort with watering and redness.
- Hand Protection : Dust may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.
- Inhalation : The dust from the product may cause discomfort of the nose (congestion and runny nose), throat and respiratory 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.

13. ECOLOGICAL INFORMATION

Neither the raw materials used nor the finished product contain any ozone depleting chemicals. This product is not classified as a hazardous air pollutant. Binder-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.

14. DISPOSAL CONSIDERATIONS

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

15. TRANSPORT INFORMATION

No special transport requirements are necessary.



16. REGULATORY INFORMATION

This product is manufactured article, not a substance nor a preparation. According to the Indonesia regulations, no label is required.

17. OTHER INFORMATION

The information contained herein is based on the present state of our knowledge. Such information is to the best of our knowledge. However, no representation, warranty or guarantee is made to the accuracy, reliability or completeness of the information.

It is the responsibility of the user of the product to ensure to his satisfaction that the product is suitable for the intended purpose and method of use. We do not accept liability for any loss or damage that may occur from the use of this information.