

Safety Data sheet

Revision date: 2025.04.10

Rigidiser

1. IDENTIFICATION OF THE MATERIAL AND THE SUPPLIER

Product name: Rigidiser
Product Description: Binder and surface hardener for ceramic fibre and refractory products.
Supplier Name: MT Refractories (Pty) Ltd
Address: Unit C 61 Steyr Street, Aureus, Randfontein, 1759
Telephone: +27 (0)67 325 5930
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2. HAZARDS IDENTIFICATION

Hazard Classification: Not classified as dangerous for health or as dangerous for the environment.
May be harmful if swallowed and may cause irritation to the skin, eyes and respiratory tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Proportion (%)
Silica (Amorphous)	7631-86-9	<60

4. FIRST AID MEASURES

Eye Contact: If in contact with eyes, thoroughly flush eyes with running clean water for at least 15 minutes. Have eye baths available and do not rub eyes. If person is wearing contact lenses, removal should be undertaken by skilled persons. Seek medical attention if irritation persists.

Skin contact: Wash areas that were in contact with the product with clean water and soap. Do not rub or scratch exposed skin. Seek medical attention if irritation persists.

Inhalation: Move to fresh air. Rinse mouth to clear throat. Do not swallow. Blow nose to expel irritant. If coughing or other symptoms persist seek medical attention.

Ingestion: Product is not likely to be ingested but if this occurs do not induce vomiting, drink plenty of water and seek medical attention.

Note: Effects are due to temporary mechanical irritation and not any allergic manifestations.

5. FIRE FIGHTING MEASURES

Flammability: Non flammable.
Fire and explosion: Incombustible and inert in fire.
Suitable Extinguishing media: No specific requirements. Material is not combustible. Use suitable extinguishing media for surrounding combustible materials.

Safety Data sheet

Revision date: 2025.04.10

6. ACCIDENTAL RELEASE MEASURES

Do not walk through spilled material. Avoid procedures that may result in water pollution.

Personal Precautions: Wear personal protective equipment (clothing, respiration protection and suitable gloves) to avoid direct contact with product.

Clean up measures: Wet clean up should be done by mop or sponge. Clean up should avoid / minimize the formation of airborne dust.

7. HANDLING AND STORAGE

Safe Handling: Wear personal protective equipment (clothing, respiration protection and suitable gloves) to avoid direct contact with product or dust. Wear respiratory equipment when using of product results in the formation of airborne particles. After service removal or clean up may result in exposure to a crystalline silica phase and depending on the application there may be other contaminants present. Minimise dust generation. During removal the exposed material should be misted / wetted only enough to we the material.

Safe storage: Product should be kept in a closed container. Physical abrasion of dried material may result in dust.

Materials to avoid: Aluminium, copper or mild steel.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits: Not determined.

Biological limit values: Not determined.

Engineering Control Measures: Use control measures to keep airborne concentration below limits

Respiratory Protection: This product is a proprietary mixture of unique ingredients. No established exposure limit for airborne concentrations and people working in the environment. Some type of respiratory protection is recommended even under the best conditions, especially when using of product results in the formation of airborne particles. Respirator selection should be made after consultation with a competent health and safety professional.

Eye Protection: Wear chemical goggles or safety glasses with side shields with side shields where there is a risk of contact with material. Do not touch eyes when hand have been exposed to material. Have eye washing facilities available. Do not wear contact lenses without appropriate eye protection.

Hand Protection: Wear suitable gloves to avoid contact with skin.

Protective Clothing: Protective clothing designed to limit direct exposure to material. Contaminated clothing should be washed separately from other clothing.

Hygiene Measures: Wash clothing after contamination, dispose of gloves, wash hands before eating and drinking.

Thermal Protection: When necessary, wear appropriate thermal protective clothing.

Safety Data sheet

Revision date: 2025.04.10

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Odor:	Odorless
pH:	Alkaline (~10)
Vapor Pressure:	Not available
Vapor Density:	Not available
Boiling Point:	Not available
Melting Point:	>1200°C
Relative density:	1.14
Evaporation rate:	Not available
% Volatiles:	Not available
Flammability:	Non Flammable
Flash Point:	Not available
Flammable Limits – Lower and Upper:	Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Product is stable under normal conditions for shipping, storage and installation.
Conditions to avoid:	Do not allow to freeze. Avoid drying cycles out of the sol as this can lead to a build up of dust.
Incompatible Material:	Contact with acids causes the product to gel.
Hazardous Decomposition:	At temperatures above 1000°C for extended periods, amorphous material transforms into crystalline phases.
Hazardous Polymerization:	None
Hazardous Reaction:	None

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:	Not acutely toxic. Avoid eye and skin contact and dust inhalation.
Eye:	Solids suspended in solution and contact with dust or powder may cause irritation.
Skin:	May cause temporary irritation.
Inhalation:	Dust from dried product may irritate the respiratory tract on prolonged or repeat contact and may aggravate pre-existing respiratory conditions.
Ingestion:	Ingestion is unlikely but should it occur, it may cause gastrointestinal disturbances. Do not induce vomiting and seek medical attention.
Carcinogenicity:	Not applicable
Chronic Effects:	Pre-existing respiratory problems may be aggravated by dust. Crystalline silica is known to be carcinogenic to humans

Safety Data sheet

Revision date: 2025.04.10

12. ECOLOGICAL INFORMATION

No information regarding the eco-toxicity or environmental fate of the product.

13. DISPOSAL CONSIDERATIONS

Unused products are classified as non-hazardous and inert and may be disposed according to local regulations.

The used product and any dust generated during maintenance or repairs may be contaminated with hazardous materials.

The proper disposal must be determined with waste analysis.

14. TRANSPORT INFORMATION

Not regulated as a hazardous substance, no specific regulations apply.

15. REGULATORY INFORMATION

Not applicable

16. OTHER INFORMATION

The information provided in this document has been compiled from sources considered accurate and dependable to the best of our knowledge, but it is not guaranteed to be so. This information is for the use and evaluation of this product in respect to hazards (safety, health and environmental). It remains the responsibility of the user to determine the product suitability for a specific purpose and to adopt the necessary safety precautions. We make no warranty as to the results to be obtained in using any material. This information is no product warranty or base for legal relationship.

It is not allowed to derive liabilities and warranties from this safety data sheet against MT Refractories (Pty) Ltd.