

Joluka Concrete Repair Mortar

Material Safety Data Sheet

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Company Details	:	Joluka (Pty) Ltd 349 Roan Crescent, Corporate Park North Midrand Gauteng South Africa
Telephone	:	+27 11 314 0795
Telefax	:	011 314 5245
Website	:	www.joluka.co.za
Email	:	sales@joluka.co.za
Product Name	:	Concrete Repair Mortar Grey / Neutral Grey Polymer modified concrete repair mortar

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Type of product : Mixture

Classification

Skin irritation	Category 2
Serious eye damage	Category 1
Carcinogenicity (Inhalation)	Category 1A (Lungs)
Specific organ toxicity- Single exposure	Category 3 (Respiratory tract irritation)
Specific organ toxicity- Repeated exposure (Inhalation)	Category 2 (Kidney, Immune system)
Specific organ toxicity- Repeated exposure (Inhalation)	Category 1 (Lungs)

Hazard Pictograms:

**Signal Word:** DANGER

Hazard Statements

H315: Causes skin irritation

H318: Causes serious eye damage

H335: May cause respiratory irritation

H350i: May cause cancer by inhalation

H372: Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled

H373: May cause damage to organs (kidneys, immune system) through prolonged or repeated exposure if inhaled.

Precautionary Statements

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/face protection.

P201 Obtain special instructions before use.

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust or mist.

P202 Do not handle until all safety precautions have been read and understood.

P270 Do not eat, drink or smoke when using this product.

P264 Wash face, hands and any exposed skin thoroughly after handling.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P310 Immediately call a POISON CENTER or doctor/ physician

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to appropriate hazardous waste collection point.

Other Hazards

In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature : Modified cement mixture

Component	CAS #	Concentration W/W %
Quartz (SiO ₂)	14808-60-7	> 30 < 50
Portland cement	65997-15-1	> 20 < 50
Calcium Carbonate (CaCO ₃)	471-34-1	> 0 > 10
Magnesium Carbonate (MgCO ₃)	12125-28-9	> 0 > 10
Calcium Oxide (CaO)	1305-78-8	> 0 > 6
Sodium Nitrate (NaNO ₃)	7631-99-4	> 1 > 3

Aluminium Oxide (Al ₂ O ₃)	1344-28-1	> 1 > 3
Sulphate Crystals (SO ₃)	10043-01-3	> 1 > 3
Ferric Oxide (Fe ₂ O ₃)	1309-37-1	> 0 > 1

4. FIRST AID MEASURES

General advice:	Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.
Inhalation:	Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice
Skin contact:	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
Eye contact:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion:	Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most important effects, both acute and delayed:	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure if inhaled. May cause damage to organs through prolonged or repeated exposure.
Notes to physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	<ul style="list-style-type: none"> Foam Water spray Dry powder Carbon dioxide (CO₂)
	Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

Unsuitable Extinguishing Media: Water jet
Do not allow run-off from firefighting to enter drains or water courses.

Specific hazards during firefighting

Do not allow run-off from firefighting to enter drains or water courses.

Specific hazards during firefighting

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

Special Protective Equipment and Fire Fighting Instructions

Wear self-contained breathing apparatus for firefighting if necessary for firefighters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation.

Environmental Precautions: Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and Materials for Containment and Cleaning Up:

Small Spills: Use dry methods to collect spilled materials. Avoid generating dust.
Do not clean up with compressed air. Neutralize with acid.
Keep in suitable, closed containers for disposal.

Large Spills: Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion:

Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling:

Avoid formation of respirable particles. Do not breathe vapors/dust.

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage:

Keep container tightly closed in a dry and well-ventilated place. Observe label precautions.

Further information on storage conditions:

Containers should be stored tightly sealed in a dry place.

Materials to avoid:

- Segregate from metals.
- Segregate from acids and bases.
- Segregate from oxidants.
- Segregate from foods and animal feeds.

Further information on storage stability:

No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Ingredients with workplace control parameters

Component	CAS #	Value Type (Form of exposure)	Control Parameters / Permissible Concentration	Basis
Quartz (SiO ₂)	14808-60-7	TWA value (Respirable fraction)	0.025 mg/m ³	ACGIHTLV
		TWA value	0.05 mg/m ³ (Respirable dust)	29 CFR1910.1001-1050
		OSHA Action level	0.025 mg/m ³ (Respirable dust)	29 CFR1910.1001-1050
		REL value (Respirable dust)	0.05 mg/m ³	NIOSH
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0		
TWA (Respirable particulate matter)	0.025 mg/m ³	ACGIH		

		PEL (respirable) TWA (Respirable dust)	(Silica) 0.05 mg/m ³ 0.05 mg/m ³ (Silica)	OSHA CARC NIOSH REL
Portland Cement	65997-15-1	TWA value (Respirable fraction) REL value (Total) REL value (Respirable) PEL (Total dust) PEL (Respirable fraction) TWA value (Total dust) TWA value (Respirable fraction) TWA value TWA (Respirable particulate matter) TWA (Respirable) TWA (total) TWA (total dust) TWA (respirable fraction) TWA (total dust) TWA (respirable dust fraction)TWA (Dust)	1 mg/m ³ 10 mg/m ³ 5 mg/m ³ 15 mg/m ³ 5 mg/m ³ 10 mg/m ³ 5 mg/m ³ 50 ppm per ft ³ 1 mg/m ³ 5 mg/m ³ 10 mg/m ³ 15 mg/m ³ 5 mg/m ³ 10 mg/m ³ 5 mg/m ³ 50 ppm per ft ³	ACGIHTLV NIOSH NIOSH 29 CFR1910.1000 (Table Z-1) 29 CFR1910.1000 (Table Z-1) 29 CFR1910.1000 (Table Z-1-A) 29 CFR1910.1000 (Table Z-1-A) 29 CFR1910.1000 (Table Z-3) ACGIH NIOSH REL NIOSH REL OSHA Z-1 OSHA Z-1 OSHA P0 OSHA P0 OSHA Z-3
Calcium Carbonate	471-34-1	TWA value TWA value (Respirable fraction)	10 mg/m ³ 5 mg/m ³	NIOSH NIOSH

Engineering measures

Provide readily accessible eye wash stations and safety showers.

Provide ventilation adequate to maintain PELs.

Personal protective equipment

Respiratory protection: Breathing protection if dusts are formed. Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection: Gloves

Eye protection: Eye wash bottle with pure water Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place

Protective Measures: Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice

Hygiene Measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Powder
Colour:	Light grey
Odour:	N/A
Relative Density:	+/- 2.3
Melting Point:	>1500 deg. C
Soluble in water:	Negligible
Flammability:	Non combustible
pH:	13
Explosiveness:	Nil

10. STABILITY AND REACTIVITY

Reactivity:

No hazardous reactions if stored and handled as prescribed/indicated.

Stability:

Stable under normal conditions. Will react with chemicals listed under incompatible materials below.

Chemical Stability: Product is chemically stable

Conditions to Avoid: See SDS section 7 - Handling and storage.

Incompatible Materials:

Strong bases

Strong acids

Hazardous decomposition products: None

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity:	Remarks:	No applicable information available.
Acute inhalation toxicity:	Remarks:	No applicable information available.
Acute dermal toxicity:	Remarks:	No applicable information available.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information

Health injuries are not known or expected under normal use. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicology Assessment

Acute aquatic toxicity: This product has no known ecotoxicological effects.

Chronic aquatic toxicity: This product has no known ecotoxicological effects.

Persistence and degradability

Biodegradability: Remarks: Not applicable for inorganic substances.

Bio accumulative potential

Bioaccumulation: Remarks: The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Distribution among environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected. The substance will not evaporate into the atmosphere from the water surface.

Other adverse effects

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

13. DISPOSAL CONSIDERATIONS

Waste from residues:

Dispose of in accordance with national, state and local regulations.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Do not discharge into drains/surface waters/groundwater.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product

14. TRANSPORT INFORMATION

UN Number: Not Regulated
UN Proper Shipping Name: Not Regulated
Transport Hazard Class(es): Not Regulated
Packing Group: Not Regulated
Marine Pollutant (y/n): No
Special Precautions: None

15. REGULATORY INFORMATION

National Chemical Inventory Listings:

TSCA: All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

DSL: All components of this product are on the Canadian DSL

16. OTHER INFORMATION

Full text of other abbreviations

29 CFR 1910.1000 (Table Z1-A):	OSHA - Table Z-1-A (29 CFR 1910.1000)
29 CFR 1910.1000 (Table Z1):	OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000
29 CFR 1910.1000 (Table Z3):	OSHA Table Z-3 (Mineral Dusts) 29 CFR 1910.1000
29 CFR 1910.1001-1050:	OSHA - Specifically Regulated Substances (29 CFR 1910.1001-1050)
ACGIH:	USA. ACGIH Threshold Limit Values (TLV)
ACGIHTLV:	American Conference of Governmental Industrial Hygienists threshold limit values (US)
NIOSH:	NIOSH Pocket Guide to Chemical Hazards (US)
NIOSH REL:	USA. NIOSH Recommended Exposure Limits
OSHA CARC:	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA P0:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
29 CFR 1910.1000 (Table Z1-A) / TWA value:	Time Weighted Average (TWA):
29 CFR 1910.1000 (Table Z1) / PEL:	Permissible exposure limit
29 CFR 1910.1000 (Table Z3) / TWA value:	Time Weighted Average (TWA):

29 CFR 1910.1001-1050 /OSHA Action level:	OSHA Action level:
29 CFR 1910.1001-1050 /TWA value:	Time Weighted Average (TWA):
ACGIH / TWA:	8-hour, time-weighted average
ACGIHTLV / TWA value:	Time Weighted Average (TWA):
NIOSH / REL value:	Recommended exposure limit (REL):
NIOSH REL / TWA:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA CARC / PEL:	Permissible exposure limit (PEL)
OSHA P0 / TWA:	8-hour time weighted average
OSHA Z-1 / TWA:	8-hour time weighted average
OSHA Z-3 / TWA:	8-hour time weighted average

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

Prepared by: **Joluka (Pty) Ltd**
Health, Safety, Environment and Quality Department
For further information, contact:
Product Safety Adviser Tel: Gunter – 011 314 0795