

MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product name: Rockbond A1501 Microsilica Powder (RB 6.08)
Recommended use: Additive for cement and concrete.
Company details: Rockbond SCP Ltd
Address: 7 Te Puni Street, Petone, Lower Hutt, Wellington, New Zealand 5012
Telephone Number: 0800 76 25 26
Emergency telephone number: 0800 76 25 26 (Hours of Operation 7.30am to 5pm Monday - Friday)
Date of preparation: January 2024

Section 2: Hazards Identification

Hazard classification: Not regulated.
Risk phrases: Not classified.
**Statement of hazardous/
dangerous nature:** NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

Section 3: Composition/information on ingredients

Substance/Mixture: Mixture.
CAS number/other identifiers
CAS number: Not applicable.
EC number: Mixture.
Product Code: 6.08

Ingredient Name	%	CAS Number
Fumes, silica	60 - 100	69012-64-2
Diiron trioxide	0.1 - <1	1309-37-1
Aluminium oxide	0.1 - <1	1344-28-1
Magnesium oxide	0.1 - <1	1309-48-4
Calcium oxide	0.1 - <1	1305-78-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4: First-aid measures

Description of necessary first-aid measures

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Skin Contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye contact:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation:	Exposure to airborne concentration above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Ingestion:	No known significant effects or critical hazards.
Skin contact:	No known significant effects or critical hazards.
Eye contact:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Over-exposure signs/symptoms

Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing.
Ingestion:	No specific data.
Skin:	No specific data.
Eyes:	Adverse symptoms may include the following: irritation, redness.
Target organs:	Contains material which may cause damage to the following organs: lungs, mucous membranes, digestive system, cardiovascular system, upper respiratory tract, skin, eyes, lens or cornea, testes.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments:	Not available.
Notes to physician:	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5: Fire-fighting measures

Extinguishing media

Suitable:	Use dry chemical powder.
Not suitable:	Do not use water jet.
Special exposure hazards:	Fine dust clouds may form explosive mixtures with air.
Hazardous combustion products:	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides.
Hazchem code:	Not available.
Special precautions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<u>Methods and materials for containment and cleaning up</u>	
Small spill:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
Large spill:	Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7: Handling and storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.

Conditions of safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fumes, silica	EH40/2005 WELs (united Kingdom (UK), 8/2007). TWA: 6 mg/m ³ 8 hour(s). Form: inhalable dust TWA: 2.4 mg/m ³ 8 hour(s). Form: respirable dust
Diiron trioxide	Safe Work Australia (Australia, 8/2005). TWA: 10 mg/m ³ 8 hour(s). Form: Dust Safe Work Australia (Australia, 8/2005). Notes: as Fe TWA: 5 mg/m ³ , (as Fe) 8 hour(s). Form: Fume
Aluminium oxide	Safe Work Australia (Australia, 8/2005). TWA: 10 mg/m ³ , 0 times per shift, 8 hour(s).
Magnesium oxide	Safe Work Australia (Australia, 8/2005). TWA: 10 mg/m ³ 8 hour(s). Form: Fume
Calcium oxide	Safe Work Australia (Australia, 8/2005). TWA: 2 mg/m ³ 8 hour(s).

Section 8: Exposure controls/personal protection

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering exposure controls:

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9: Physical and chemical properties

Appearance

Physical State:	Powder.
Colour:	Blue/grey.
Odour:	Odourless.
Odour threshold:	Not available.
pH:	Not available.
Melting point:	1200°C to 1300°C (2192 to 2372°F).
Boiling point:	Not applicable.
Flash point:	Not applicable.
Burning rate:	Not applicable.
Burning time:	Not applicable.
Evaporation rate:	Not available.
Flammability (solid,gas):	Not available.
Lower and upper explosive (flammable) limits:	Not applicable.
Vapour pressure:	Not applicable.
Vapour density:	Not available.
Density:	Not available
Relative density:	Not available.
Solubility:	Insoluble in the following materials: cold water.
Solubility in water:	Insoluble.
Partition coefficient: n-Octanol/water:	Not available.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not available.
Viscosity:	Not available.

Section 10: Stability and reactivity

Chemical stability:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials:	Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological information

Information on the likely routes of exposure

Inhalation:	No known significant effects or critical hazards.
Ingestion:	No known significant effects or critical hazards.
Skin contact:	No known significant effects or critical hazards.
Eye contact:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No specific data.
Ingestion:	No specific data.
Skin contact:	No specific data.
Eye contact:	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity:	Not available.
Irritation/Corrosion:	Not available.
Sensitisation:	Not available.

Potential chronic health effects

General:	Not available.
Inhalation:	Not available.
Ingestion:	Not available.
Skin contact:	Not available.
Eye contact:	Not available.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Chronic toxicity:	Not available.
Carcinogenicity:	Not available.
Mutagenicity:	Not available.
Teratogenicity:	Not available.
Reproductive toxicity:	Not available.
Specific target organ toxicity:	Not available.
Aspiration hazard:	Not available.

Numerical measures of toxicity

Acute toxicity estimates:	Not available.
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Section 12: Ecological information

Ecotoxicity:	No known significant effects or critical hazards.
Aquatic and terrestrial toxicity:	Not available.
Persistence/degradability:	Not available.
Bioaccumulative potential:	Not available.
<u>Mobility in soil</u>	
Soil/water partition	
Coefficient (Koc):	Not available.
Other adverse effects:	No known significant effects or critical hazards.

Section 13: Disposal considerations

Disposal methods:	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
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Section 14: Transport information

Regulatory information	UN number	Proper Shipping name	Classes	Packaging group	Label No.	Additional information
New Zealand Class	Not regulated.	-	-	-	-	-
ADG Class	Not regulated.	-	-	-	-	-
ADR/RID Class	Not regulated.	-	-	-	-	-
IATA Class	Not regulated.	-	-	-	-	-
IMDG Class	Not regulated.	-	-	-	-	Marine pollutant: No.

Section 15: Regulatory information

New Zealand Inventory of Chemicals (NZIoC): All Components are listed or exempted.

Australia Inventory (AICS): All components are listed or exempted.

Section 16: Other information

History

Date of printing: 12.01.2024

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Key to abbreviations:

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN = United Nations

References: Not available.

CONTACT DETAILS:

7 TE PUNI STREET, WELLINGTON, NEW ZEALAND

T +64 4 568 5401 | F +64 4 568 4580



Notice to reader

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