

MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product name: Rockbond A220 Expansion Agent
Recommended use: Premix cement/sand products which are mixed with water for use in concrete repairs, construction and civil engineering.
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: Xi; R41, R37/38
ERMA NZ Approval Code HSR002544
HSNO Hazard Classification 8.3A, 6.1E, 6.3A

Risk phrases: R41- Risk of serious damage to eyes.
R37/38- Irritating to respiratory system and skin.

Safety phrases: S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Statement of hazardous/
dangerous nature:** 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: 6.01

Ingredient Name	%	CAS Number
Aluminium Powder	50-<70	7429-90-5

Section 3: Composition/information on ingredients

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:	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion:	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact:	Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation:	Irritating to respiratory system.
Ingestion:	Irritating to mouth, throat and stomach.
Skin contact:	Irritating to skin.
Eye contact:	Severely irritating to eyes. Risk of serious damage to eyes.

Section 4: First-aid measures

Over-exposure signs/symptoms

Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing.
Ingestion:	No specific data.
Skin:	Adverse symptoms may include the following: irritation, redness.
Eyes:	Adverse symptoms may include the following: pain or irritation, watering, redness.
Target organs:	Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, eyes.

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5: Fire-fighting measures

Extinguishing media

Suitable:	Use an extinguishing agent suitable for the surrounding fire.
Special exposure hazards:	No specific fire or explosion hazard.
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.
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. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Keep in suitable, closed containers for disposal. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill:

Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. 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. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 12 for waste disposal.

Section 7: Handling and storage

Precautions for safe handling: Avoid dust formation. 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Conditions of safe storage,
including any
incompatibilities:**

Store in accordance with local regulations. 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. 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
Aluminium Powder	Safe Work Australia (Australia, 8/2005). TWA: 10mg/m ³ 8 hour(s).

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.

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.

Section 8: Exposure controls/personal protection

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:	Silver.
Odour:	Pleasant.
Odour threshold:	Not available.
pH:	Not applicable.
Melting point:	Not applicable.
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:	1 g/cm ³ (20C (68F))
Relative density:	Not available.
Solubility:	Soluble in the following materials: cold water.
Solubility in water:	Very slightly.
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:	No specific data.
Incompatible materials:	No specific data.
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:	Causes skin irritation
Eye contact:	Causes serious eye irritation.

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.

Section 11: Toxicological information

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.
<u>Numerical measures of toxicity</u>	
Acute toxicity estimates:	Not available.

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. 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.

HSNO Approval Number:

HSR002544

HSNO Group Standard:
HSNO Classification:

8.3A, 6.1E, 6.3A

Australia Inventory (AICS):

All components are listed or exempted.

Safety, health and Environmental regulations specific for the product:

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16: Other information**History**

Date of printing: 12.01.2024
Date of issue/Date of revision: 12.01.2024
Date of previous issue: January 2022
Version: 5

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.

Notice to reader

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