



MSDS



Material Safety Data Sheet

PRODUCT NAME SPECIAL PURPOSE BLENDED CEMENT

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name BLUE CIRCLE SOUTHERN CEMENT LIMITED
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Synonym(s) SPECIAL PURPOSE CEMENT, MARINE CEMENT
Use(s) BINDER - REFRACTORIES, CEMENT

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

| | | | | | |
|-----------------|----------------|---------------------------|----------------|------------------|----------------|
| UN No. | None Allocated | Hazchem Code | None Allocated | Pkg Group | None Allocated |
| DG Class | None Allocated | Subsidiary Risk(s) | None Allocated | EPG | None Allocated |

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | Formula | Conc. | CAS No. |
|-----------------------------------|-----------------|---------------|---------------|
| SILICA, CRYSTALLINE - QUARTZ | Si-O2 | <1% | 14808-60-7 |
| PORTLAND CEMENT | Not Available | 30-80% | 65997-15-1 |
| GROUND BLAST FURNACE SLAG | Not Available | 20-60% | 65997-69-2 |
| GYPSUM | Ca-S-O4-2(H2-O) | <10% | 13397-24-5 |
| FLY ASH | Not Available | <5% | 68131-74-8 |
| LIMESTONE | Ca-C-O3 | <5% | 1317-65-3 |
| HEXAVALENT CHROMIUM (CONTAMINANT) | Not Available | Not Available | Not Available |

4. FIRST AID MEASURES

Eye Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.

Inhalation If over exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.

Skin Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.

Advice to Doctor Treat as for moderate to strong alkali and symptomatically.

First Aid Facilities Eye wash facilities should be available.

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5. FIRE FIGHTING MEASURES

| | |
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| Flammability | Non flammable. No fire or explosion hazard exists. |
| Fire and Explosion | Non flammable. No fire or explosion hazard exists. |
| Extinguishing | Non flammable. |
| Hazchem Code | None |

6. ACCIDENTAL RELEASE MEASURES

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| Spillage | If spilt (bulk), contact emergency services if appropriate. Wear dust-proof goggles, PVA/rubber gloves, a Class P1 (Particulate) respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust. |
|-----------------|--|

7. STORAGE AND HANDLING

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|-----------------|---|
| Storage | Store in cool, dry, well ventilated area, removed from moisture, oxidising agents (eg. hydrogen fluoride, phosphorus oxide), acids, ethanol, interhalogens (eg. chlorine trifluoride) and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. |
| Handling | Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (eg. if container is damaged). |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|---------------------------|--|
| Ventilation | Do not inhale dust/ powder. Use with adequate natural ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard. |
| Exposure Standards | SILICA, CRYSTALLINE - QUARTZ (14808-60-7) ES-TWA: 0.1 mg/m ³ (Silica Quartz, respirable, NOHSC) ES-TWA#: 0.1 mg/m ³ (QLD); 0.15 mg/m ³ (NSW) WES-TWA: 0.2 mg/m ³ PORTLAND CEMENT (65997-15-1) ES-TWA: 10 mg/m ³ Portland Cement ES-TWA#: 0.05 mg/m ³ Chromium (VI) Compounds (contaminant) WES-TWA: 10 mg/m ³ GYPSUM (13397-24-5) ES-TWA: 10 mg/m ³ Inspirable dust LIMESTONE (1317-65-3) ES-TWA: 10 mg/m ³ WES-TWA: 10 mg/m ³ HEXAVALENT CHROMIUM (CONTAMINANT) (Not Available) ES-TWA: 0.05 mg/m ³ . |
| PPE | Wear dust-proof goggles and rubber or PVC gloves. At high dust levels, wear a Class P3 (Particulate) respirator or a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter. Where an inhalation risk exists, wear a Class P1 (Particulate) Respirator. When using large quantities or where heavy contamination is likely, wear coveralls. |

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9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---------------------------|--|----------------------------------|---------------|
| Appearance: | FINE OFF-WHITE TO DARK GREY POWDER | Solubility (water): | < 10 g/L |
| Odour: | ODOURLESS | Specific Gravity: | 2.9 - 3.2 |
| pH: | 11 - 13 | % Volatiles: | NOT AVAILABLE |
| Vapour Pressure: | NOT AVAILABLE | Flammability: | NON FLAMMABLE |
| Vapour Density: | NOT AVAILABLE | Flash Point: | NOT RELEVANT |
| Boiling Point: | 128 C | Upper Explosion Limit: | NOT RELEVANT |
| Melting Point: | > 1200 C | Lower Explosion Limit: | NOT RELEVANT |
| Evaporation Rate: | NOT AVAILABLE | Autoignition Temperature: | NOT AVAILABLE |
| Exposure Standard: | 0.1 mg/m3 Crystalline silica quartz (respirable) | | |

10. STABILITY AND REACTIVITY

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| Reactivity | Incompatible with oxidising agents (eg hypochlorites), ethanol, acids (eg hydrofluoric acid) and interhalogens (eg chlorine trifluoride). Water contact may increase product temperature 2-3 C. |
| Decomposition Products | May evolve toxic gases if heated to decomposition. |

11. TOXICOLOGICAL INFORMATION

| | |
|------------------------------|---|
| Health Hazard Summary | Slightly corrosive. Avoid eye or skin contact or dust inhalation. This product has the potential to cause acute and chronic health effects with over exposure. Crystalline silica can cause silicosis (lung disease) with chronic over exposure, however due to low levels present and product application, adverse health effects are not anticipated. Crystalline silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1). |
| Eye | Corrosive. Severe irritant upon contact with powder/ dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage. |
| Inhalation | Slightly corrosive. Over exposure may result in severe mucous membrane irritation & bronchitis. Hexavalent chromium is reported to cause respiratory sensitisation, however due to the trace amount present, a hazard is not anticipated under normal conditions of use. |
| Skin | Slightly corrosive. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis and sensitisation. |
| Ingestion | Slightly corrosive. Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route. |
| Toxicity Data | SILICA, CRYSTALLINE - QUARTZ (14808-60-7) Carcinogenicity: Classified as a human carcinogen (IARC Group 1) HEXAVALENT CHROMIUM (CONTAMINANT) (Not Available) Carcinogenicity: Confirmed human carcinogen (IARC Group 1) Health Surveillance: Required [NOHSC:1005(1994)] |

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12. ECOLOGICAL INFORMATION

Environment Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Contact the manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

Shipping Name None Allocated

UN No. None Allocated **Hazchem Code** None Allocated **Pkg Group** None Allocated

DG Class None Allocated **Subsidiary Risk(s)** None Allocated **EPG** None Allocated

15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information CEMENT CONTACT DERMATITIS: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence of soluble (hexavalent) chromium.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

ABBREVIATIONS:

mg/m³ - Milligrams per cubic metre

ppm - Parts Per Million

TWA/ES - Time Weighted Average or Exposure Standard.

CNS - Central Nervous System

NOS - Not Otherwise Specified

pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

M - moles per litre, a unit of concentration.

IARC - International Agency for Research on Cancer.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is

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made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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End of Report