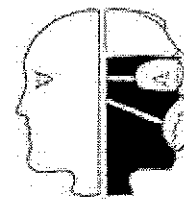


**BLUE CIRCLE
SOUTHERN****MATERIAL SAFETY
DATA SHEET***"Hazardous according to criteria of Worksafe Australia"***COMPANY DETAILS**

Company: Blue Circle Southern Cement
ACN 008 528 523

Address: Clunies Ross Street, Prospect NSW 2148

Telephone Number: (02) 9033 4000

Emergency Only Number: 1800 033 111

UN Number: None Allocated
Dangerous Goods

Class & Sub-risk: None Allocated
Hazchem Code: None Allocated
Emerg. Guide:

Packaging Method: None Allocated
Poison Schedule: None Allocated

I. PRODUCT IDENTIFICATION

Product Name: CONCRETE MIX, PREMIUM BLENDED CONCRETE MIX, QUICKSET CONCRETE, LODUST CONCRETE MIX

Other Names: Premixed Concrete

Use: Portland cement based concrete products used in the construction industry.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance: Grey, granular material.

Boiling/Melting Point (°C): Gypsum in the Portland cement starts to dehydrate at 128°C.
Melting point <1200°C.

Solubility in Water: < 10 gms/litre **Solution pH:** 11

Bulk Density: 1800 - 2200 kg/m³

INGREDIENTS**CAS NO.****PROPORTION**

Portland Cement Chemicals	65997 - 15 - 1*	< 10
Fly Ash	68131 - 74 - 8*	< 10
Granulated Blast Furnace Slag	65997 - 69 - 2*	< 10
Sand (Quartz)	14808 - 60 - 7*	30 - 60
Aggregate	Not available	30 - 60
Proprietary Additives	Not hazardous	< 10
Polymeric Fibres**	9003 - 07 - 0	< 10

** (Premium Blended Concrete Mix only)

***NOTE:** Ingredients may contain varying quantities of respirable crystalline silica as an impurity, usually concrete mixes contain <1%.

II. HEALTH HAZARD INFORMATION

HEALTH EFFECTS

(A) SHORT TERM (ACUTE) EXPOSURE:

Swallowed: Alkaline corrosive to mouth and throat. May cause burning sensation and abdominal discomfort.

Eyes: Irritating and corrosive to eyes. May cause chemical conjunctivitis and redness and watering of eyes with damage to cornea.

Skin: It will dry the skin and may cause alkali burns and irritant contact dermatitis, especially when plastic (unhardened). Due to trace amounts of hexavalent chrome (Cr^{6+}), wet concrete may cause chromium sensitisation and allergic contact dermatitis to some individuals.

Inhaled: Irritating to nose, throat and respiratory system causing coughing and sneezing.

(B) LONG TERM (CHRONIC) EXPOSURE:

Inhaled: Repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lung) and lung cancer. It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs).

Studies have shown that smoking increases the risk of bronchitis, silicosis and lung cancer in persons exposed to crystalline silica.

Small quantities of crystalline silica may be present in this product as a result of impurities in some ingredients. Crystalline silica is present in greater quantities in concrete by reason of the addition of sand and aggregate. Crystalline silica dust derived from the use of this product could be inadvertently inhaled during the dry cutting of hardened concrete.

Skin: Repeated skin contact with wet concrete has been associated with both irritant dermatitis and allergic (contact) dermatitis. The latter is due to the presence of traces of water soluble hexavalent chromium in cement.

FIRST AID

Swallowed: Wash mouth and lips with water. Do not induce vomiting. Give water or milk to dilute stomach contents. Seek medical attention, if symptoms persist.

Eyes: Irrigate with copious quantities of clean water or saline solution for at least 15 minutes. Seek medical attention if discomfort persists. Continue irrigating the eyes with clean water or saline solution while transporting to medical facility.

Skin: Remove dusty clothing. Wash skin with tepid soapy water; shower if required. Apply skin moisturiser.

Inhaled: Move immediately to fresh air. Seek medical attention, if symptoms persist.

First Aid Facilities:

Eye wash station.

ADVICE TO DOCTOR

Treat as for moderate to strong alkali.
Treat symptomatically.
Contact a Poisons Information Centre.

III. PRECAUTIONS FOR USE

EXPOSURE STANDARDS – WORKSAFE AUSTRALIA

This product is classified with an exposure standard of:

Dust (NOS-not otherwise specified): 10 mg/m³TWA (time-weighted average) as inspirable dust.

Crystalline silica (quartz): 0.2 mg/m³ TWA as respirable dust.

However, where a State or Territory prescribes a lower exposure standard, the lower exposure standard applies.

Refer to **Other Information** in **Section IV, SAFE HANDLING INFORMATION.**

MANUFACTURERS' RECOMMENDATIONS

Keep exposure to dust as low as practical.

If inspirable dust levels are kept below 2 mg/m³, health problems such as skin, eye and respiratory irritation may be minimised.

Respirable crystalline silica (quartz) exposure levels should be kept below the recommended action level of 0.1 mg/m³.

Avoid repeated skin contact with wet concrete.

ENGINEERING CONTROLS

Avoid generating dust. All work with cement should be carried out in such a way as to minimise exposure to dust and repeated skin contact. Use local mechanical ventilation or extraction in areas where dust, generated whilst handling cement, could escape into the enclosed work environment.

For handling of individual bags, follow safe manual handling practices. Work areas should be cleaned regularly by wet sweeping or vacuuming. If generating dust cannot be avoided, see personal protection recommendations below.

PERSONAL PROTECTION

Always wear suitable protective clothing and use respiratory equipment.

Skin: Use impervious elbow length gloves (AS 2161), such as PVC, impervious boots and full-length clothing to protect the skin from contact with the dust, particularly wetted dust or wet concrete. After working with this product, workers are advised to shower with soap and water and apply a skin moisturiser. Work clothes should be washed regularly.

Eyes: Safety spectacles with side shields or safety goggles (dust resistant AS/NZ 1336) should be worn if dust is likely to be generated.

Respiratory: If dust is generated wear a class P1 or P2 particulate respirator (AS/NZS 1715 & 1716). Use only respirators which comply with Australian Standards and are fitted correctly. Note that persons with facial hair will have difficulty in obtaining a satisfactory face seal. For alternatives see AS/NZS 1715: *Selection and uses of respiratory protective devices.*

Please refer to the Worksafe Information Booklet "Cement Dermatitis".

Persons with a history of respiratory illness or reduced pulmonary function should avoid places with high dust levels. When cutting or abrading the hardened concrete, keep it wetted with water to avoid creating hazardous dust. Do not breathe this dust as it may contain various quantities of crystalline silica.

FLAMMABILITY

This product is non-flammable. Does not support combustion of other material.

IV. SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

The product should be stored and transported in a manner to prevent ingress of moisture and emission of dust.

SPILLS AND DISPOSAL

- Spills:** Spills may be vacuumed or swept; avoid generation of dust.
Collect spilled material and seal in clean, dry, labelled containers for disposal.
Clean-up personnel should follow the precautions outlined in **Section III, Precautions For Use.**
- Disposal:** This product should be disposed of in accordance with requirements of local authorities.

FIRE/EXPLOSION HAZARD

This product is non-flammable and does not cause dust explosions.

OTHER INFORMATION

In June 1997, crystalline silica was evaluated by the International Agency for Research on Cancer (IARC): "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)".

- Smoking:** Cigarette smoking increases the risk of occupational respiratory diseases. It is Recommended that all storage and work area should be smoke-free zones.

For information phone

NSW: (02)-9033-4056	Title of Contact Person:	Manager Technical Sales
Victoria: (03)-5241-8133	Title of Contact Person:	Manager Technical Sales
Issue Date: April 2003	Approved by:	Manager Technical Sales

The information in this document is believed to be accurate. Please check the currency of this MSDS by contacting this Company.

The provision of this information should not be construed as a recommendation to use this product in violation of any patent right or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including conjunction with other products.