

SAFETY DATA SHEET (SDS)**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER****1.1 Product Identifier**

Product: CONCRETE, PREMIXED CONCRETE
Synonym(s): READY-MIXED CONCRETE • WET-MIX CONCRETE • EXPOSED CONCRETE

1.2 Product Use

BGC Pre-mixed Concrete is used for a wide variety of applications in Building and Construction.

1.3 Details of the supplier of the product

Supplier name: BGC (Australia) Pty Ltd T/As BGC Concrete
Address: Level 6, 22 Mount St, Perth WA 6000 AUSTRALIA
Telephone: (08) 6220 4700
Email: concrete@bgc.com.au
Website: www.bgconcrete.com.au

1.4 Emergency telephone number(s)

Emergency: 08 6220 4700 (6.30am – 5pm WST)
Emergency (A/H): 13 11 26 (Poisons Information Centre)

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s): Skin Corrosion/Irritation: Category 2
Serious Eye Damage / Eye Irritation: Category 2A

2.2 Label elements

Signal word: WARNING
Pictogram(s):

**Hazard statement(s)**

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Prevention statement(s)

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection

Response statement(s)

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment is advised - see first aid instructions.
P332 + P337 + P313 If skin or eye irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before re-use.

Storage statement(s)

None allocated

Disposal statement(s)

None allocated.

2.3 Other hazards

BGC Premixed Concrete is classified as Non-Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Due to the product form (wet-mix), over exposure via inhalation is not anticipated with normal use. However, if dust is generated via cutting, grinding, machining, etc. dry/set product:

* Acute over exposure by inhalation may result in respiratory irritation.

* Chronic over exposure by inhalation to silica quartz dust may result in silicosis (lung disease). Principal symptoms of silicosis are coughing and breathlessness.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredients	CAS Number	EC Number	Content
Quartz (Crystalline Silica) (i.e. sand)	14808-60-7	238-878-4	30% to 60%
Water	7732-18-5	231-791-2	>10%
Coarse Aggregate (Gravel)	-	-	30% to 60%
Portland / Slag / Cream Cement	-	-	10% to 30%
Admixture(s)	-	-	<10%

Note:

- Depending upon the source material, it may contain respirable quartz (crystalline silica). Due to the product form (wet mix), over exposure via inhalation is not anticipated unless dust is generated via cutting, grinding, machining, etc. dry/set product.
- Chromium VI is a trace impurity in Portland cement (< 20 ppm).
- May contain trace amounts (<0.01%) of naturally occurring respirable Elongated Mineral Particulates. The levels detected are determined to be well below the threshold level for exposure by inhalation.

4. FIRST AID MEASURES

4.1 Description of first aid measures

- EYE:** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
- INHALATION:** Due to product form / nature of use, an inhalation hazard is not anticipated. However, if exposed to dry product, remove from contaminated area. Apply artificial respiration if not breathing.
- SKIN:** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
- INGESTION:** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Irritating and potentially corrosive to the eyes and skin. Due to the product form (wet-mix), over exposure via inhalation is not anticipated with normal use, unless dust is generated via cutting, grinding, machining, etc. dry/set product. Chronic over exposure to silica quartz dust may result in silicosis (lung disease). Principal symptoms of silicosis are coughing and breathlessness. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. Crystalline silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

4.3 Immediate medical attention and special treatment needed

Treat as for moderate to strong alkali and symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non-flammable. May evolve toxic gases if strongly heated.

5.3 Advice for fire-fighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe 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.

7.2 Conditions for safe storage, including any incompatibilities

Where storage is applicable, store in a clean, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled.

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Ingredient	Reference	Exposure standards			
		TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Portland Cement	SWA (AUS)	-	10	-	-
Quartz or Sand (Respirable Dust)	SWA (AUS)	-	0.1	-	-

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering: Avoid generating dust. All work should be carried out in such a way as to minimise exposure to dust and repeated skin contact. Where dust could be generated whilst handling, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. Maintain dust levels below the recommended exposure standard.

Eyes: Safety glasses with side shields or safety goggles should be worn

Hands: Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.

Body: Wear long sleeved shirt, full-length trousers and rubber boots.

Respiratory: Where an inhalation (when exposed to dry product) risk exists wear a Class P1 (Particulate) respirator, dependent on a site specific risk assessment.

PPE: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	VISCOUS GREY LIQUID
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	12 to 13
Vapour density	NOT AVAILABLE
Specific gravity	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Auto-ignition temperature	NOT AVAILABLE
Decomposition temperature	> 1200°C
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid contact with incompatible substances.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorite), ethanol, interhalogens (e.g. chlorine trifluoride) and acids.

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition (>1200°C).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: No known toxicity data is available for this product. Based on available data, the classification criteria are not met.

Skin: Irritating to the skin. Contact may result in irritation, redness, pain, rash and dermatitis. Caution: Prolonged contact with wet-mix may cause serious skin burns.

Eye: Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible alkaline burns.

Sensitization: This product is not classified as a skin or respiratory sensitiser. However, some individuals may exhibit an allergic response upon exposure to cement, possibly due to trace amounts of chromium.

Mutagenicity: Insufficient data available to classify as a mutagen

Carcinogenicity: This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1), however due to the trace amounts present, the criteria for classification is not met.

Reproductive: Insufficient data available to classify as a reproductive toxin

STOT – single exposure

Over exposure to dust (if generated) may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties

STOT – repeated exposure

Due to the product form (wet-mix), over exposure via inhalation is not anticipated with normal use. However, if dust is generated via cutting, grinding, machining, etc. dry/set product, repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibro nodular lung disease caused deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness.

Aspiration This product is not expected to present an aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

May be harmful to the aquatic environment due to the alkaline nature of the product. This product is non-toxic to aquatic organisms when present as a cured solid.

12.2 Persistence and degradability

Product is persistent and would have a low degradability.

12.3 Bioaccumulative potential

This product is not expected to bio accumulate.

12.4 Mobility in soil

A low mobility would be expected in a landfill situation.

12.5 Other adverse effects

Avoid contamination of drains and waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Reuse or recycle where possible. Ensure measures are taken to prevent dust generation. Dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	None Allocated	None Allocated
14.2 Proper Shipping Name	None Allocated	None Allocated	None Allocated
14.3 Transport hazard class	None Allocated	None Allocated	None Allocated
14.4 Packing Group	None Allocated	None Allocated	None Allocated

14.5 Environmental hazards No information provided

14.6 Special precautions for user

Hazchem code None Allocated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

Classifications Safework Australia criteria are based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Hazard codes Xi Irritant

Risk phrases R36/38 Irritating to eyes and skin.

Safety phrases S24/25 Avoid contact with skin and eyes.
S37/39 Wear suitable gloves and eye/face protection.

Inventory listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

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.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this 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 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 ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

[END OF SDS]