

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Concrete, Premixed Concrete
Other Descriptors	Ready-mixed concrete, Grout, Mortar,
Used for	Premixed concrete is used for a wide variety of building and construction applications
Other	Plastic concrete begins to harden about one hour after delivery and is quite hard Within eight hours. The rate of setting depends on ambient conditions (temperature, wind and humidity) and the concentration of cementitious ingredients
Supplier Name	Gunlake Concrete
Head Office Address	Level 2, 53 Cross St Double Bay NSW
Contact Numbers	Ph (02) 9363 1744, Fax (02)4841 1366
Email	concrete@gunlake.com.au
Website	www.gunlake.com.au
Emergency Contacts	000 Fire Ambulance Police
Poisons Hotline	13 11 26 (Australia only)

2. HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE:

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

- The product, when it solidifies as supplied, is classified as non-hazardous
- Dust created when the product is cut, abraded, or crushed may contain crystalline silica some of which may be respirable (particles small enough to go into the deep parts of the lung when breathed in).
 - Skin Corrosion/Irritation: Category 2
 - Serious Eye Damage / Eye Irritation: Category 1
 - Specific Target Organ Toxicity (Repeated Exposure) Category 2

SIGNAL WORD	WARNING
PICTOGRAM	
HAZARD STATEMENT	H302 – Harmful if swallowed H314 – Causes severe skin burns and eye damage H317 – May cause an allergic skin reaction H318 - Causes serious eye damage H373 – May cause damage to lungs by inhalation (dust from dried product)
PREVENTION STATEMENT	P260 - Do not breathe dust. P264 – Wash thoroughly after handling. P270 – Do not eat, drink or smoke when using this product P272 – Contaminated work clothing should not be allowed out of the workplace P280 - Wear protective gloves/ protective clothing.

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RESPONSE STATEMENT	P280 - Wear protective gloves/protective clothing/eye protection/face protection. 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.
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3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Identification	Content
Sand containing QUARTZ (crystalline silica)	CAS 14808-60-7	20-85 %
Crushed Stone, Gravel, or Blast Furnace Slag.	Not required	20-85 %
Portland cement	65997-15-1	10 – 60 %
Chromium VI	1333-82-0	2-20 ppm
Water	7732-18-5	0-20 %
Other ingredients may be added:		
Blast Furnace Slag or Fly Ash Pozzolans		0-20%
Pigments: (metallic oxide colours)		0-10%
Silica Fume (amorphous silica)	7699-41-4	0-10%
Chemical Admixtures:		2-10%
Polystyrene Balls	9003-53-6	0-60%
Polypropylene Fibres		0-10%
Steel Fibres		0-10%

Ingredient Notes:

- Chromium VI is a trace impurity in Portland Cement.
- Portland Cement, Sand, Crushed stone, Gravel, Blast Furnace Slag and Fly Ash may contain crystalline silica (quartz). Depending on the source of the material for the above ingredients, the crystalline silica content of the final product can vary from product to product.
- Cementitious additives may contain traces of metals

4. FIRST AID MEASURES

EYES	Flush thoroughly with flowing water, while holding eyelids open, for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention
INHALATION	Remove victim from affected area and monitor. If symptom persist seek medical advice and treatment. Symptoms may include Persistent cough, irritable throat
SKIN	Remove heavily contaminated clothing. Wash off skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent redness, irritation or burning of the skin
SWALLOWED	Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist, seek medical attention
INGESTION	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a Doctor. Due to product form and application, ingestion is considered unlikely

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FIRST AID	Installation of eye bath facilities and shower wash-down area.
RECOMMENDATIONS	Advice to Doctor: Treat symptomatically or consult a Poisons Information Centre

Further notes:

Prolonged exposure to Crystalline Silica can result in lung fibrosis (silicosis). Symptoms of which include, persistent cough, breathlessness and fatigue. Crystalline silica is classified as carcinogenic to humans (IARC Group 1) and may cause lung disease including lung cancer. Seek medical advice if symptoms persist.

Use appropriate PPE to minimise exposure to airborne dust particles. Clean well-maintained Air-conditioned cabs on equipment, personal dust masks, protective clothing and eye wear.

5. FIRE FIGHTING MEASURES

FLAMMABILITY	Not flammable or combustible
HAZCHEM CODE	None allocated
FIRE FIGHTING PROCEDURE	Nonapplicable
HAZARDS	None
SPECIAL PPE FOR FIRE FIGHTERS	None

6. ACCIDENTAL RELEASE MEASURES

The following pertains mainly to dust particles when disturbed or in the process of manufacture or handling.

SPILLS	- Dust is best cleaned up by vacuum device to avoid making dust airborne. Wetting down before sweeping up dust may be a useful control measure - Recommendations on Exposure Controls / Personal Protection (see Section 8 below) should be followed during spill clean-up if conditions are dusty Plastic concrete; - Recover spilled material by shovelling into containers and using mechanical sweepers, but avoid generating dust. Prevent spillage or wash down water from entering sewers drains, stormwater and watercourses - If contamination of drains or watercourses has occurred, advise the relevant state environment protection agency and the company Disposal - May be disposed of as inert landfill in accordance with local authority regulations
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7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Prevent all contact with skin. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet
CONDITIONS FOR SAFE STORAGE	No special storage requirements
ADDITIONAL INFORMATION	Not classified as a Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (6th Edition)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards:

Ingredients	Reference	Time Weighted Average		Short term exposure limit	
		ppm	Mg/m3	ppm	Mg/mg3
Quartz (Crystalline Silica)	Safe Work Australia	-	0.05	-	-
Portland Cement	Safe Work Australia	-	10	-	-
Chromium V	Safe Work Australia	-	0.05		

No Biological limit values have been entered for this product

Notes on Exposure Standard:

All occupational exposures to atmospheric contaminants should be kept to as low as reasonably practicable and in all cases to below the Workplace Exposure Standard (WES). TWA (Time Weighted Average): the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Exposure Controls:

ENGINEERING	All work should be carried out in such a way as to minimise dust generation, and exposure to dust. Mechanical ventilation: Dust extraction and collection may be used, if necessary, to control airborne dust levels.
EYE / FACE	Wear safety glasses or splash-proof goggles when handling material to avoid contact with eyes
HANDS	Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.
BODY	Wear a long-sleeved shirt and (full length) trousers
RESPIRATORY	Where an inhalation risk exists wear a Class P2 (Particulate) disposable face piece or a respirator, dependent on a site-specific risk assessment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance - A mouldable generally grey mixture which will set and harden to become a stable solid. Colour may vary from near white to any other colour

ODOUR	Some added ingredients used in concrete may create a smell of ammonia
FLAMMABILITY	Non-Flammable

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FLASH POINT	Not Relevant
BOILING POINT	Not Relevant
MELTING POINT	Melting point >1200 0C
EVAPORATION RATE	Not Available
PH	>7.0 dry state. >10 in wet plastic state
VAPOUR DENSITY	Not Available
SPECIFIC GRAVITY	2.5
SOLUBILITY (WATER)	Not soluble. Can react on mixing with water forming an alkaline solution with Ph >11
VAPOUR PRESSURE	Not Available
UPPER EXPLOSION LIMIT	Not Relevant
LOWER EXPLOSION LIMIT	Not Relevant
PARTITION COEFFICIENT	Not Available
AUTOIGNITION TEMPERATURE	Not Available
DECOMPOSITION TEMPERATURE	Not Available
VISCOSITY	Not Available
EXPLOSIVE PROPERTIES	Not Explosive
OXIDISING PROPERTIES	Non Oxidising
ODOUR THRESHOLD	Not Available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY	Stable under recommended conditions of storage
POSSIBILITY OF HAZARDOUS REACTIONS	None
CONDITIONS TO AVOID	Keep away from water. Dust generation.
INCOMPATIBLE MATERIALS	Sugars, acids or solutions of either
HAZARDOUS DECOMPOSITION PRODUCTS	None

11. TOXICOLOGICAL INFORMATION

Information on Toxicological effects

ACUTE TOXICITY	
SWALLOWED	Unlikely in normal use in industrial situation. Concrete is abrasive and mildly corrosive. Swallowing either plastic or hardened concrete will result in abdominal discomfort. Symptoms can include nausea, stomach cramps and vomiting
EYE	Plastic concrete will cause severe irritation in contact with the eyes, which will result in redness, stinging and lachrymation. Alkaline properties may produce severe alkali burns or serious eye damage. Dry concrete dust may cause mechanical irritation resulting in redness and lachrymation
SKIN	Contact with plastic concrete will cause severe irritation and possible chemical burns, cement dermatitis and dry skin · Portland cement is alkaline in nature so plastic concrete and mortars are strongly alkaline (pH of 12 -13). Strong alkalines, like strong acids, are harmful or caustic to the skin. This may produce alkali burns · Portland cement is hygroscopic - it absorbs water. Plastic concrete needs water to harden. It will draw water away form any other material in contacts, including skin. This will irritate and dry the skin

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INHALED	Sprayed plastic concrete droplets and dry concrete dust may irritate the nose, throat and respiratory tract causing coughing, sneezing and breathing difficulties. Pre-existing upper respiratory and lung diseases included asthma and bronchitis may be aggravated
CHRONIC (Long term)	
EYE	In dust form may cause inflammation of the cornea
SKIN	Repeated or prolonged skin contact with plastic concrete can dry the skin and cause alkali burns due to the caustic nature of the product. This condition is described as irritant contact dermatitis. Some individuals may experience allergic dermatitis because there are trace amounts of water-soluble hexavalent chromium salts (Chromium VI) present in Portland Cement (0 - 20ppm). Once a person is sensitised to water soluble chromates any further skin exposure to chromates will bring back the symptoms
INHALED	In dust form it may cause inflammation of lining tissue of the respiratory system. Repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lung), and may increase the risk of other serious disorders including scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs). The product contains a proportion of respirable free crystalline silica in the quartz component. Crystalline silica (inhaled in the form of quartz or cristobalite from occupational sources) has been classified by The International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1).
OTHER INFORMATION	Inhalation of airborne particles from other sources in the work environment, including those from cigarette smoke, may increase the risk of respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones and that other airborne contaminants should be kept to a minimum

12. ECOLOGICAL INFORMATION

TOXICITY	Product forms an alkaline slurry when mixed with water
PERSISTENCE AND DEGRADABILITY	Product is persistent and is non-degradable
BIOACCUMULATIVE POTENTIAL	This product is not expected to bioaccumulate
MOBILITY IN SOIL	A low mobility would be expected in a landfill situation.
BIOACCUMULATIVE POTENTIAL	This product is not expected to bioaccumulate.
OTHER ADVERSE EFFECTS	Crystalline silica is non-toxic to aquatic and terrestrial organisms; is not biodegradable; is insoluble and is expected to have low mobility in landfill

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14. Disposal Consideration

SPILLS AND LEAKS (Plastic concrete)	Recover spilled material by shovelling into containers and using mechanical sweepers, but avoid generating dust. Prevent spillage or wash down water from entering sewers drains, stormwater and watercourses. If contamination of drains or watercourses has occurred, advise the relevant state environment protection agency and the company.
DISPOSAL	May be disposed of as inert landfill in accordance with local authority regulations. Measures should be taken to prevent dust generation during disposal and exposure and personal precautions should be observed (see above)
LEGISLATION	Dispose of in accordance of local legislation

15. Transportation information

Not classified as a dangerous good by the Criteria of the ADG Code, IMDG or IATA

16. Regulatory Information

Poisons Schedule	Not Scheduled
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17. Other Information

Date of revision of this SDS – September 2020

Notice: We believe the information contained in this Safety Data Sheet is accurate and is given in good faith, but no warranty expressed or implied is made. The suggested information is based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Users are advised to make their own independent determination of suitability and completeness of information at their own risk, in relation to the particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage cause by any person acting or refraining from action as a result of any information contained in this Safety Data Sheet. Where the information provided herein disclosed a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken