

# SAFETY DATA SHEET

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

Uses

# Product name PREMIXED CONCRETE

Synonyms BLOCKFILL • CONCRETE • READYMIXED CONCRETE • SPRAYRITE

#### 1.2 Uses and uses advised against

CONCRETE • WET MIX CONCRETE

Premixed concrete is used in a wide variety of applications in the building and construction industry. It is delivered in a plastic state and sets hard usually within a few hours of delivery. It progressively gains strength at a variable rate. Usually at least 80% of strength development occurs within 4 weeks.

## 1.3 Details of the supplier of the product

Supplier name	CONCRITE PTY LIMITED
Address	Suite 2, Level 1, 36 Eton Street, Sutherland, NSW, 2232, AUSTRALIA
Telephone	(02) 9545 6777; (02) 9545 6111
Fax	(02) 9545 6866; (02) 9545 6444
Email	enquiries@concrite.com.au
Website	http://www.concrite.com.au/

#### 1.4 Emergency telephone numbers

Emergency

13 11 26

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS classifications	Skin Corrosion/Irritation: Category 2
	Skin Sensitisation: Category 1
	Serious Eye Damage / Eye Irritation: Category 1

2.2 Label elements	
Signal word	DANGER
Pictograms	
Hazard statements	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
Prevention statements	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.

P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

# ChemAlert.

#### **Response statements**

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.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment is advised - see first aid instructions.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before re-use.

#### Storage statements

None allocated.

#### **Disposal statements**

P501

Dispose of contents/container in accordance with relevant regulations.

#### 2.3 Other hazards

Skin contact with wet cement, fresh concrete or mortar may cause irritation, dermatitis or burns. May cause damage to products made of aluminium or other non-noble metals.

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

Ingredient	CAS Number	EC Number	Content
QUARTZ (CRYSTALLINE SILICA) (IE. SAND)	14808-60-7	238-878-4	>60%
PORTLAND CEMENT	65997-15-1	266-043-4	10 to 50%
FLY ASH	-	-	<20%
ADDITIVE(S)	-	-	<5%
PIGMENT(S)	-	-	<5%
CHROMIUM TRIOXIDE	1333-82-0	215-607-8	0.0002 to 0.002%
POLYPROPYLENE FIBRES	-	-	<10%
POLYSTYRENE BEADS	-	-	<10%
WATER	7732-18-5	231-791-2	<10%
AMORPHOUS FUMED SILICA	-	-	<5%

**Ingredient Notes** 

1. 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.

2. Chromium VI is a trace impurity in Portland Cement (2 - 20 ppm).

# 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

- If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to Eve stop by a Poisons Information Centre, a doctor, or for at least 15 minutes. Due to product form / nature of use, an inhalation hazard is not anticipated. However, if exposed to dry Inhalation 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 Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Eye wash facilities and safety shower should be available.
- **First aid facilities**



#### 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. Ophthalmological opinion should be sought for ocular burns.

## 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 firefighters

No fire or explosion hazard exists.

#### 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. If dry, avoid generating dust. If washing down the area, use water absorbent booms to prevent run off from entering stormwater, sewers and watercourses.

#### 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. Wet concrete is a heavy material and appropriate control of manual handling risks is required when handling material.

#### 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. Plastic premixed concrete has a limited life after batching and will set hard.

#### 7.3 Specific end uses

No information provided.



# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
Ingredient		ppm	mg/m³	ppm	mg/m³
Chromium (VI) Compounds (as Cr), water insoluble	SWA (AUS)		0.05		
Fumed silica (respirable dust)	SWA (AUS)		2		
Portland Cement	SWA (AUS)		10		
Quartz (respirable dust)	SWA (AUS)		0.1		

#### **Biological limits**

Ingredient	Determinant	Sampling Time	BEI
CHROMIUM TRIOXIDE	Total chromium in urine	End of shift at end of workweek	25 µg/L
	Total chromium in urine	Increase during shift	10 µg/L

Reference: ACGIH Biological Exposure Indices

#### 8.2 Exposure controls

**Engineering controls** Avoid generating dust. All work with 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.

# PPE

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 long sleeved shirt, full-length trousers and rubber boots. Never kneel directly in wet concrete or allow extended contact of skin with moisture from wet concrete.
Respiratory	Where an inhalation risk exists (when exposed to dry product) wear a Class P1 (Particulate) respirator, dependent on a site specific risk assessment.



# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	GREY DAMP SANDY MIXTURE TO SLURRY
Odour	CHARACTERISTIC ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
рН	> 10
Vapour density	NOT AVAILABLE
Specific gravity	2.3 to 2.5
Solubility (water)	INSOLUBLE
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



#### 9.1 Information on basic physical and chemical properties

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. Keep away from water when plastic.

#### 10.5 Incompatible materials

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

## 10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

# 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.

#### Information available for the ingredients:

Ingredient		Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)	
CHROMIUM TRIOXID	)E	80 mg/kg (rat)			
Skin	Causes skin irritation. Conta contact with wet-mix may ca		edness, pain, rash and derr	natitis. Caution: Prolonged	
Eye	Causes serious eye damage. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis an possible alkaline burns. Caution: Prolonged contact with wet-mix may cause serious eye damage.				
Sensitisation	Not classified as causing response upon exposure to reaction.				
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 t	oxin.		
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 fibronodular lung disease caused deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness.				
Aspiration	Not expected to present an a	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 bioaccumulate.

#### 12.4 Mobility in soil

A low mobility would be expected in a landfill situation.

#### 12.5 Other adverse effects

No information provided.

# 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

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

Not a Marine Pollutant

#### 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 is 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 Hat Substances [NOHSC: 1008(2004)].				
Hazard codes	Xi	Irritant			
Risk phrases	R38 R41 R43	Irritating to skin. Risk of serious damage to eyes. May cause sensitisation by skin contact.			
Safety phrases	S24/25 S36/37/39	Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.			



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

# **16. OTHER INFORMATION**

Additional information	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. 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 form of product, 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.				
	It should be including: form measures; proprepare a rep	ECTS FROM EXPOSURE: noted that the effects from exposure to this product will depend on several factors n of product; frequency and duration of use; quantity used; effectiveness of control otective equipment used and method of application. Given that it is impractical to port which would encompass all possible scenarios, it is anticipated that users will ks and apply control methods where appropriate.			
Abbreviations	CAS # CNS EC No. EMS GHS GTEPG IARC LC50 LD50 mg/m <sup>3</sup> OEL	American Conference of Governmental Industrial Hygienists Chemical Abstract Service number - used to uniquely identify chemical compounds Central Nervous System EC No - European Community Number Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) Globally Harmonized System Group Text Emergency Procedure Guide International Agency for Research on Cancer Lethal Concentration, 50% / Median Lethal Concentration Lethal Dose, 50% / Median Lethal Dose Milligrams per Cubic Metre Occupational Exposure Limit relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). Parts Per Million Short-Term Exposure Limit Specific target organ toxicity (repeated exposure) Specific target organ toxicity (single exposure) Standard for the Uniform Scheduling of Medicines and Poisons Safe Work Australia Threshold Limit Value Time Weighted Average			



**Report status** 

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier 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, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, 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 SDS.

Prepared by

Risk Management Technologies 5 Ventnor Ave, West Perth Western Australia 6005 Phone: +61 8 9322 1711 Fax: +61 8 9322 1794 Email: info@rmt.com.au Web: www.rmt.com.au

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