SAFETY DATA SHEET

Cleary Bros Premixed Concrete

SECTION 1: Identification of the Material and Supplier

Product:	CONCRETE
Other Names / Synonyms:	Pre-Mixed concrete, Ready-Mixed concrete, Wet-Mix Concrete, Grout
Use:	Concrete for the Building and Construction Industry

Supplier Details	Address	Emergency Telephone	
Cleary Bros (Bombo) Pty Ltd ABN: 28 000 157 808	39 Five Islands Road Port Kembla NSW 2505	Supplier: Poisons Info: Emergency:	(02) 4275 1000 13 11 26 000

SECTION 2: Hazardous Identification

HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS

Classified as hazardous according to the GHS.

Not classified as a dangerous good by the criteria of the ADG Code

GHS Classification(s): Skin Corrosion/Irritation: Category 2

Serious Eye Damage / Eye Irritation: Category 2A

Hazard category	Signal word	Hazard statement	Symbol
2	Warning	H315 Causes skin irritation	 Exclamation mark
2A	Warning	H319 Causes serious eye irritation	 Exclamation mark

Precautionary statements			
Prevention	Response	Storage	Disposal
P264: Wash thoroughly after handling. **P280:** Wear protective gloves. Wear eye	**P302: + P352:** If on skin: Wash with plenty of soap and water. **P305 + P351 + P338:** If in eyes: Rinse	Nil	Nil

protection/face protection.	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 + P313:** If skin irritation occurs, get medical advice/attention. **P337 + P313:** If eye irritation persists, get medical attention. **P362:** Take off contaminated clothing and wash before reuse.		

SECTION 3: Composition / Information on Ingredients

Ingredient	CAS No	Content
Gravel	N/A	0-80%
Sand (containing Crystalline Silica – Quartz)	14808-60-7	0-90%
Portland Cement	65997-15-1	5-70%
Water	7732-18-5	10-40%
Blast Furnace Slag	N/A	0-10%
Fly Ash	N/A	0-10%
Other ingredients not determined to be hazardous	N/A	<1%

Notes: 1. Exposure to respirable quartz (crystalline silica) is not expected due to product form, unless dust is generated via cutting, grinding, machining, etc. set product.

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

SECTION 4: First Aid Measures

Eye:	If in eyes, hold eyelids apart and flush continuously with running water for at least 15 minutes or until advised to stop by Poisons Information Centre or a doctor. If symptoms such as irritation or redness persist, seek medical attention.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair thoroughly with running water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.
Inhalation:	If inhaled, remove to fresh air. Apply artificial respiration if not breathing. If irritation persists seek medical attention.
Ingestion:	Rinse mouth and lips with water. Do not induce vomiting. Contact the Poison Information Centre on 13 11 26 or a doctor (at once).
Delayed Effects:	Due to product form, over-exposure to crystalline silica is not expected unless dust is generated via cutting, grinding, machining etc. set product. Chronic over-exposure to crystalline silica dust may result in silicosis (lung disease). Principal symptoms of silicosis include coughing and breathlessness. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of Chromium VI present. Crystalline silica and Chromium VI are classified as carcinogenic to humans (IARC Group 1).

SECTION 5: Fire Fighting Measures

Extinguishing media:	Non-flammable. Use an extinguishing agent suitable for the surrounding fire.
Specific hazards:	None
Advice for firefighters:	None
HAZCHEM code:	None allocated

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:	Recommendations on exposure control and personal protection should be followed during spill clean-up (see section 8).
Environmental precautions:	Prevent runoff from entering drains and watercourses. If contamination of drains or watercourses has occurred, advise the relevant state environment protection agency.
Methods and materials for containment and cleaning up	Contain spillage. Recover spilled material by shovelling into containers and/or using mechanical sweepers, ensuring dust is minimised. Prevent spillage or wash down water from entering drains and watercourses.

SECTION 7: Handling and Storage

Safe handling:	Concrete is a heavy material, and appropriate control of manual handling risk is required when handling wet or dry concrete. Use of safe work practices are recommended to avoid eye or skin contact and inhalation when handling wet concrete. Observe good personal hygiene, including washing hands before eating. The cutting, grinding, machining etc., of dry concrete can cause dust to be generated which contains crystalline silica. Control methods to manage these risks are outlined in section 8.
Safe storage:	No special storage requirements. Wet premixed concrete will set hard (generally within 2-3 hours) after batching.
Incompatibilities:	Incompatible with sugars, acids, or solutions of either. Interaction with sugars will cause a degradation of the product. Interaction with acids will cause a reaction. Handling and storage of the wet material at temperatures less than 0°C or greater than 30°C may cause a degradation of the quality of the material.

SECTION 8: Exposure Controls / Personal Protection

Exposure Standards:

Ingredient	Reference	TWA (mg/L)	STEL (mg/L)
Portland Cement (inspirable dust)	Safework Australia	10	N/A
Crystalline Silica	Safework Australia	0.1	N/A

Biological Limits: No biological limit allocated.

Engineering Controls:

Ventilation	Minimise dust generation and exposure to dust. Local mechanical ventilation may be required in areas where spray droplets from wet concrete or dry dust could escape into the work environment.

Personal Protection:

Personal Hygiene:	Wash hands before eating, drinking, using the toilet, or smoking. Wash work clothes regularly.
Skin Protection:	Minimise contact with wet concrete materials. Never kneel in wet concrete or allow extended contact of skin with wet concrete. When handling wet concrete, personnel should wear loose comfortable protective clothing (such as long sleeve shirt, full-length trousers), impervious boots (AS/NZS 4501), and suitable impervious gloves such as PVC or rubber (AS 2161). Remove clothing which has become contaminated with wet or dry concrete to avoid prolonged contact with the skin. If concrete gets into boots, remove sock and boots immediately and wash skin thoroughly.
Eye Protection:	Avoid contact with eyes. When handling wet concrete, splash resistant safety glasses with side shields, safety goggles, or a face-shield should be worn.
Respiratory Protection:	Where dust may be generated from cutting, grinding, machining etc. dry concrete, use a wet method as the preferred method. Where this is not possible, use a Class P1 or P2 particulate respirator in accordance with AS/NZS 1715 and AS/NZS 1716.

SECTION 9: Physical And Chemical Properties

Appearance:	Most commonly a viscous grey liquid. Viscosity ranges from near liquid to a friable soft solid. If pigments added, colour will be determined by the colour of the pigments.
Odour:	Odourless
Odour threshold:	Not determined
pH:	12 – 13 pH units
Melting point:	>1200°C
Initial boiling point:	Not available
Flash point:	Not relevant
Evaporation rate:	Not determined
Flammability:	Non-flammable
Flammability limits:	Not relevant
Vapour pressure:	Not available
Vapour density:	No available
Relative density:	2.4 g/cm3
Solubility:	Insoluble. Can react on mixing with water to form an alkaline solution.
Partition coefficient (n-octanol/water)	Not available
Viscosity:	Not available

Auto-ignition temperature:	Not available
Decomposition temperature:	>1200°C

SECTION 10: Stability and Reactivity

Reactivity:	Review information in this table below.
Chemical stability:	Stable under recommended conditions of storage.
Possibility of hazardous reactions:	Polymerization is not expected to occur.
Conditions to avoid:	Avoid contact with incompatible substances including water.
Incompatible materials:	Incompatible with oxidising agents (eg. hypochlorites), ethanol, acids (eg. hydrofluoric acid) and interhalogens (eg. chlorine trifluoride). Water contact may increase product temperature 2°C to 3°C.
Hazardous decomposition products:	May evolve toxic gases if heated to decomposition (>1200°C).

SECTION 11: Toxicological Information

Acute toxicity:	No known toxicity data is available for this product. Based on available data, the classification criteria are not met.
Skin corrosion/irritation:	Irritating to the skin. Contact may result in irritation, redness, pain, rash and dermatitis. Prolonged contact with wet concrete may cause serious skin burns.
Serious eye damage/ irritation:	Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis, and possible alkaline burns.
Respiratory or skin sensitivity:	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 VI.
Germ cell mutagenicity:	Insufficient data available to classify as a mutagen.
Carcinogenicity:	This product contains crystalline silica which is classed 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. Chromium VI 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 toxicity:	Insufficient data available to classify as a reproductive toxin.
STOT – single exposure:	Over exposure to dust may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties.
STOT – repeat exposure:	If dust is generated by cutting, grinding, machining etc. dry concrete, repeated exposure to crystalline silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused by the deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness.
Aspiration hazard:	This product is not expected to present an aspiration hazard.

SECTION 12: Ecological Information

Ecotoxicity:	Product forms an alkaline slurry when mixed with water. Product is non-toxic to aquatic organisms once hardened.
Persistence and degradability:	Product is persistent and would have a low degradability.
Bioaccumulative potential:	Product is not expected to bioaccumulate.
Mobility in soil:	A low mobility would be expected in a landfill situation.
Other adverse effects:	Avoid contamination of drains and watercourses.

SECTION 13: Disposal Considerations

Waste Disposal:	Reuse or recycle where possible. 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 Section 8).

SECTION 14: Transport Information

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

UN Number:	None allocated
Proper shipping name:	None allocated
Transport hazard class:	None allocated
Packing group number:	None allocated
Environmental hazards for transport purposes:	No information provided
Special precautions for user:	Transport equipment should be strong enough to contain a fluid with an effective specific gravity of 2.4.

SECTION 15: Regulatory Information

Poison schedule:	Not scheduled
AICS:	All chemicals listed on the Australian Inventory of Chemical Substances (AICS) or are exempt.
Other requirements:	Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State and Territory) as they are applicable to crystalline silica, requiring exposure assessment, controls, and health surveillance.

Section 16: Other Information

Date of revision of SDS:	9/1/2020
Changes made to previous version:	SDS updated in detail throughout, drawing on industry standards and practices, and prepared in accordance with the Code of Practice: Preparation of safety data sheets for hazardous chemicals, published by Safework Australia in May 2018.

Abbreviations:

ADG Code	The Australian Code for the Transport of Dangerous Goods by Road and Rail, as in force or remade from time to time, approved by the Transport and Infrastructure Council
AICS	Australian Inventory of Chemical Substances
CAS#	Chemical Abstract Service number – used to uniquely identify chemical compounds
GHS	Globally Harmonised System of Classification and Labelling of Chemicals, 3rd revised edition, published by the United Nations as modified by Schedule 6 to the WHS Regulations.
IARC	International Agency for Research on Cancer
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
SWA	Safework Australia
TWA	Time Weighted Average
UN Number	A number assigned to dangerous goods by the United Nations Subcommittee of Experts on the Transport of Dangerous Goods

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 procedures are 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.

END OF SDS