



SAFETY DATA SHEET

Pre-mixed Concrete

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Premix Pre-mixed Concrete

Other Names: Premix Stylecrete, Premix Mortar Mix, CLSM, Grout, Ready-mixed Concrete

Recommended use: Premixed concrete is used for a wide variety of applications in building and civil engineering projects. When sprayed it is used for encapsulating steel work as well as structural applications.

Note: This SDS covers many types of Concrete. Individual composition of hazardous constituents will vary between types of Concrete.

Supplier Name: Premix Concrete S.A.

Address: 26 Pentland Rd Salisbury SA 5106 Australia

Telephone: +61 8 8281 2600 (8-00 am to 4-30 pm Mon to Fri only)

Website: www.premix.com.au

Emergency Phone Number: Poisons Information Centre 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE:

Classified as **Hazardous** according to Australian WHS Regulations

GHS CLASSIFICATION(S):

- Skin Corrosion/Irritation: Category 2
- Serious Eye Damage/Eye Irritation: Category 2A

LABEL ELEMENTS:

Signal Word

WARNING

Pictograms



Hazard Statement(s)

H315 Causes skin irritation
H319 Causes serious eye damage

Prevention Statement(s)

P264 Wash skin or eyes thoroughly after handling
P280 Wear 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 reuse.

Storage Statement(s)

None allocated

Disposal Statement(s)

None allocated

OTHER HAZARDS:

Premix Pre-mixed 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.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS Number | Proportion |
|------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|
| Aggregate - sand, crushed stone, gravel, or slag containing Crystalline silica (quartz) | 14808-60-7 | >80% |
| Portland cement (Chromium VI (hexavalent Chromium)) | 65997-15-1 1333-82-0 | 10-60% 2-20 ppm |
| Water | | <20% |
| OTHER INGREDIENTS MAY BE ADDED: | | <10% |
| Polypropylene or steel | | |
| Polystyrene beads (reduced density) | 9003-53-6 | 0-10% |
| Metallic oxide pigments (colouring) | | 0-10% |
| Silica fume (amorphous silica) | 7699-41-4 | 0-10% |
| Chemical Admixtures (water reducers, plasticisers, etc. (refer AS 1478)) | | <10% |

SECTION 4: FIRST AID MEASURES**Description of First Aid Measure**

Swallowed: Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention

Eyes: Flush thoroughly with flowing water for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention. If wet concrete is splashed in the eye, always treat as above, and get urgent medical attention.

Skin: Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.

Inhaled: Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.

First Aid Facilities: Eye wash station. Wash facilities.

Advice to Doctor: Treat symptomatically or consult a Poisons Information Centre.

Most important symptoms and effect, 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).

Immediate medical attention and special treatment needed

Treat as for moderate to strong alkali and symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

Special Hazards Arising From the Substance or Mixture

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

Advice for Firefighters

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.

Hazchem Code

None allocated

SECTION 6: ACCIDENTAL RELEASE MEASURES

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.

Environmental precautions

Prevent product from entering drains and waterways.

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.

Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

SECTION 7: HANDLING AND STORAGE

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 risk is required when barrowing, shoveling or carrying quantities of wet concrete.

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.

Wet premixed concrete has a limited life after batching and will set hard. The rate of setting depends on the ambient conditions and amount of agitation. May be stored for very short periods of time (less than twenty minutes) in self-cleansing hoppers with sides at an angle of at least 45° to the horizontal.

Contact with sugars, acids or solutions of either will cause a serious degradation of the quality of the material. A safety hazard is created by such contact due to the potential failure of the structure being constructed. Similarly handling and transporting the material at temperatures less than 0°C or greater than 30°C may cause a degradation of the quality of the material with a consequent safety hazard arising from the potential failure of the structure being constructed.

Specific end use(s)

Concrete is widely used as a structural component in construction applications.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Exposure Standards

| Ingredient | Reference | TWA | | STEL | |
|--------------------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Portland Cement | SWA (AUS) | - | 10 | - | - |
| Quartz (respirable dust) | SWA (AUS) | - | 0.1 | - | - |

Biological limits

No biological limit values have been entered for this product.

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** Personal protective equipment (PPE) should meet recommended national standards
- 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.
- Respiratory** Where an inhalation (when exposed to dry product) risk exists wear a Class P1 (Particulate) respirator, dependent on a site specific risk assessment.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Appearance:** Semi-fluid, flowable, granular paste in a variety of colour (usually grey)
- Odour:** Odourless
- pH:** 12 to 13
- Flammability:** Non-Flammable
- Flash Point:** Not Relevant
- Boiling Point:** Not Available
- Melting Point:** Not Available
- Evaporation Rate:** Not Available
- Vapour Density:** Not Available
- Specific gravity:** 1.9 – 2.4
- 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:** Varies
- Explosive Properties:** Not Available
- Oxidative Properties:** Not Available
- Odour Threshold:** Not Available
- Solubility (Water):** 0.1 – 1% (slightly soluble)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Carefully review all information provided in sections Chemical stability and Hazardous decomposition products.

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.

Incompatible materials

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

Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

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.
- Sensitisation:** 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 fibronodular 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.

SECTION 12: ECOLOGICAL INFORMATION

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.

Persistence and Degradability

Product is persistent and would have a low degradability.

Bioaccumulative potential

This 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 waterways.

SECTION 13: DISPOSAL CONSIDERATIONS

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.

SECTION 14: TRANSPORTATION 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) |
|--------------------------------|-------------------------|-------------------------------|--------------------------------|
| UN number: | None allocated | None allocated | None allocated |
| Proper Shipping Name: | None allocated | None allocated | None allocated |
| Transport Hazard Class: | None allocated | None allocated | None allocated |
| Packing Group: | None allocated | None allocated | None allocated |

Environmental Hazards

No information provided

Special Precautions for user

Hazchem code: None allocated

SECTION 15: REGULATORY INFORMATION

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 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.

SECTION 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.

Abbreviations:

| | |
|-------------------|-------------------------------------------------------------------------------------------------|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CAS # | Chemical Abstract Service number – used to uniquely identify chemical compounds |
| CNS | Central Nervous System |
| EC No. | European Community Number |
| EMS | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) |
| GHS | Globally Harmonised System |
| GTEPG | Group Text Emergency Procedure Guide |
| IARC | International Agency for Research on Cancer |
| LC50 | Lethal Concentration, 50% / Median Lethal Concentration |
| LD50 | Lethal Dose, 50% / Median Lethal Dose |
| mg/m ³ | Milligrams per Cubic Metre |
| OEL | Occupational Exposure Limit |
| pH | Relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm | Parts Per Million |
| STEL | Short-Term Exposure Limit |
| STOT – RE | Specific target organ toxicity (repeated exposure) |
| STOT – SE | Specific target organ toxicity (single exposure) |
| SUSMP | Standard for the Uniform Scheduling of Medicines and Poisons |
| SWA | Safe Work Australia |
| TLV | Threshold Limit Value |
| TWA | Time Weighted Average |

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MSDS Revision Summary

Supersedes Issue Date: 30/07/2015

Reasons for Issue: Update SDS to GHS

We believe the information presented herein is based on data considered to be accurate as of the date of preparation of this SDS. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, without a risk assessment for safe use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the products.

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END of MSDS