# **SAFETY DATA SHEET**

# **BORAL PRE-MIXED CONCRETE**

Infosafe No.: HXOBC ISSUED Date : 27/06/2022 ISSUED by: BORAL AUSTRALIA

# Section 1 - Identification

Product Identifier BORAL PRE-MIXED CONCRETE

**Company Name** BORAL AUSTRALIA

Address Triniti T2, Level 3, 39 Delhi Road North Ryde NSW 2113 AUSTRALIA

**Telephone/Fax Number** Tel: (02) 9220 6300

Emergency Phone Number 13 11 26 (Poisons Information Centre)

Recommended use of the chemical and restrictions on use  $\mathsf{Concrete}\cdot\mathsf{Wet}$  Mix Concrete

Boral Pre-mixed Concrete is used for a wide variety of applications in building and civil engineering.

#### **Other Names**

Name
ASPIRE (R)
BORAL COLORI®
BORAL EXPOSE®
BORALSTONE®
ENFLO
ENVIROCRETE (R)
ENVISIA®
GROUT
LUMINESQUE (R)
READY-MIXED CONCRETE
WET-MIX CONCRETE
WINTERSLAB (R)

#### Additional Information

Website: http://www.boral.com.au

# Section 2 - Hazard(s) Identification

**GHS classification of the substance/mixture** Physical Hazards: Not classified as a Physical Hazard

Health Hazards: Skin Corrosion/Irritation: Category 2 Serious Eye Damage / Eye Irritation: Category 1

Environmental Hazards: Not classified as an Environmental Hazard

Signal Word (s) DANGER

Hazard Statement (s) H315 Causes skin irritation. H318 Causes serious eye damage.

Pictogram (s) Corrosion



Precautionary Statement – Prevention P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### **Precautionary Statement – Response**

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 (see first aid instructions on this label). P332+P313 If skin irritation occurs: Get medical advice/attention.

P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

#### **Precautionary Statement – Storage**

Not Applicable

**Precautionary Statement – Disposal** Not Applicable

Precautionary Statement – General Not Applicable

#### **Other Information**

Classification of the substance or mixture: CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### 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.

Boral 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.

#### Section 3 - Composition and Information on Ingredients

Ingredients				
Name	CAS	Proportion		
QUARTZ (CRYSTALLINE SILICA) (IE. SAND)	14808-60-7	30-60 %		
Water	7732-18-5	>10 %		
GRAVEL	-	30-60 %		
PORTLAND / SLAG / FLY ASH CEMENT	-	10-30 %		
ADMIXTURE(S) / ACTIVATOR(S)	-	<10 %		

#### **Other Information**

Substances / Mixtures: Ingredient: QUARTZ (CRYSTALLINE SILICA) (IE. SAND) EC Number: 238-878-4

Ingredient: WATER EC Number: 231-791-2

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 (< 20 ppm).

3. Although rare, may contain trace amounts (<0.01%) of naturally occuring respirable Elongated Mineral Particulates. The levels detected are determined to be well below the threshold level for exposure by inhalation.

#### **Section 4 - First Aid Measures**

#### 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.

#### 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.

#### 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.

#### 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.

#### **First Aid Facilities**

Eye wash facilities and safety shower should be available.

#### Indication of immediate medical attention and special treatment needed if necessary

Treat as for moderate to strong alkali and symptomatically.

#### Most important symptoms/effects, acute, delayed and aggravated medical conditions

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).

# **Section 5 - Firefighting Measures**

#### Suitable Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

#### Specific hazards arising from the chemical

Non flammable. May evolve toxic gases if strongly heated.

Hazchem Code None allocated.

Decomposition Temperature

> 1200°C

#### Precautions in connection with Fire

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.

# Section 6 - Accidental Release Measures

#### **Emergency Procedures**

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

#### Methods and materials for containment and 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.

#### **Environmental Precautions**

Prevent product from entering drains and waterways.

#### **Other Information**

#### Reference to other sections:

See Sections 8(Exposure Controls/Personal Protection) and 13(Disposal Considerations) 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.

#### 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.

#### Other Information

Specific end uses: No information provided.

#### Section 8 - Exposure Controls and Personal Protection

#### Occupational exposure limit values

Control parameters: Ingredient: Portland Cement Reference: SWA [AUS] TWA: 10 mg/m<sup>3</sup>

Ingredient: Quartz (respirable dust) Reference: SWA [AUS] Page 4 / 9

TWA: 0.05 mg/m<sup>3</sup>

Ingredient: Quartz (respirable dust) Reference: WorkSafe VIC TWA: 0.02 mg/m<sup>3</sup>

#### **Biological Monitoring**

No biological limit values have been entered for this product.

#### **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.

#### **Respiratory Protection**

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

#### **Eye and Face Protection**

Wear safety glasses or splash-proof goggles when handling material to avoid contact with eyes.

#### **Hand Protection**

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

#### Personal Protective Equipment

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

#### **Body Protection**

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

#### **Section 9 - Physical and Chemical Properties**

Properties	Description	Properties	Description
Form	Liquid	Appearance	Viscous grey liquid
Odour	Odourless	Melting Point	Not available
Boiling Point	Not available	Decomposition Temperature	> 1200°C
Solubility in Water	Insoluble	рН	12 to 13
Vapour Pressure	Not available	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Partition Coefficient: n-octanol/water (log value)	Not available
Flash Point	Not relevant	Flammability	Non flammable
Auto-Ignition Temperature	Not available	Explosion Limit - Upper	Not relevant
Explosion Limit - Lower	Not relevant	Explosion Properties	Not available
Oxidising Properties	Not available	Relative Density	Not available

### Section 10 - Stability and Reactivity

#### Reactivity

Carefully review all information provided in sections 10.2 (Chemical stability) to 10.6 (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

#### **Toxicology 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**

Contactmay result in irritation, redness, pain, rash and dermatitis. Caution: Prolonged contact with wet-mixmay cause serious skin burns.

#### Serious Eye Damage/Irritation

Contactmay result in irritation, lacrimation, pain, redness, conjunctivitis and possible alkaline burns. Caution: Prolonged contact with wet-mix may cause serious eye damage.

#### **Respiratory Sensitisation**

Not classified as causing respiratory sensitisation. However, some individuals may exhibit an allergic response upon exposure to cement, possibly due to trace amounts of chromium.

#### 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 Toxicity**

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 Hazard**

Not expected to present an aspiration hazard.

#### Mutagenicity

Insufficient data available to classify as a mutagen.

#### Section 12 - Ecological Information

#### Ecotoxicity

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.

#### Mobility

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**

Avoid contamination of drains and waterways.

# Section 13 - Disposal Considerations

#### 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).

#### Local Legislation

Dispose of in accordance with relevant local legislation.

# Section 14 - Transport Information

UN Number None Allocated

Proper Shipping Name None Allocated

Transport Hazard Class None allocated.

Packing Group None allocated.

Hazchem Code None allocated.

IATA UN Number NCAD

IATA Proper Shipping Name Not dangerous for conveyance under IATA code

#### IMDG UN Number NCAD

IMDG Proper Shipping Name Not dangerous for conveyance under IMO/IMDG code

**Environmental Hazards** No information provided.

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

LAND TRANSPORT (ADG): UN Number: None allocated. Proper Shipping Name: None allocated. Transport hazard class: None allocated. Packing Group: None allocated.

SEA TRANSPORT (IMDG / IMO): UN Number: None allocated. Proper Shipping Name: None allocated. Transport hazard class: None allocated. Packing Group: None allocated.

AIR TRANSPORT (IATA / ICAO): UN Number: None allocated. Proper Shipping Name: None allocated. Transport hazard class: None allocated. Packing Group: None allocated.

# Section 15 - Regulatory Information

#### **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 (GHS Revision 7).

**Poisons Schedule** Not Scheduled

# **Global Inventory Status**

Country/Region Inventory	Status Description	Country/Region Inventory	Status Description
Australia (AICS/AIIC)	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, or are exempt.		

# Section 16 - Any Other Relevant Information

#### **Revisions Made**

**Revision history:** Revision: 3.0 **Description: Standard SDS Review** Date of Issue: 08-06-2020 Revision: 2.0 **Description: Standard SDS Review** Date of Issue: Mar 2016 Revision: 1.0 **Description: Initial SDS Creation** Date of Issue: Nov 2014

Team Member: National Technical Manager, Cement **Review Role: Quality** Team Member: WHS Advisor, QLD Office **Review Role: Safety** Team Member: Environmental Sustainability Manager, Cement **Review Role: Environment & Community** Team Member: National Compliance Officer, Heavy Vehicles, Logistics **Review Role: Transport & Dangerous Goods** Team Member: National Health & Hygiene Manager **Review Role: Health & Hygiene** Team Member: National Technical Manager, Cement **Review Role: Product Custodian** 

#### User Codes

User Title Label	User Codes
Wis Numbers	00993317
Wis Numbers	06497985

#### Signature of Preparer/Data Service 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.rmtglobal.com

#### **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 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.

#### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; 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 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.: EC No - European Community Number EMS: Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) **GHS: Globally Harmonized 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<sup>3</sup>: 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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