# **Safety** Data Sheet



### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name GENERAL PURPOSE CEMENT

Synonyms BERRIMA SL ● BLUE CIRCLE GENERAL PURPOSE CEMENT ● BLUE CIRCLE HIGH EARLY STRENGTH

CEMENT ● BLUE CIRCLE OFF WHITE CEMENT ● BLUE CIRCLE ® SOUTHERN WHITE CEMENT ● BRIGHTONLITE ● CRÈME CEMENT ● GP CEMENT ● HARDIES CEMENT ● HE CEMENT ● HES CEMENT ● HIGH EARLY STRENGTH CEMENT ● ISO-MENT ● KOORAGANG GP ● MALDON GP ● MALDON SL ● OFF WHITE CEMENT ● SHRINKAGE LIMITED CEMENT ● SL CEMENT ● SOUTHERN WHITE CEMENT ●

SUNLITE • TYPE GP • TYPE HE • TYPE SL • TYPE SR • WHITE CEMENT

1.2 Uses and uses advised against

Uses BINDING AGENT • CONCRETE • CONSTRUCTION • GROUT • INDUSTRIAL APPLICATIONS •

MANUFACTURE OF CEMENTS • MASONRY • MORTAR • SOIL STABILISATION

1.3 Details of the supplier of the product

Supplier name BORAL AUSTRALIA

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

**Telephone** (02) 9220 6300

Website <a href="http://www.boral.com.au">http://www.boral.com.au</a>

1.4 Emergency telephone numbers

**Emergency** 13 11 26 (Poisons Information Centre)

### 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### **Physical Hazards**

Not classified as a Physical Hazard

#### **Health Hazards**

Skin Corrosion/Irritation: Category 2

Serious Eye Damage / Eye Irritation: Category 1

Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)

#### **Environmental Hazards**

Not classified as an Environmental Hazard

#### 2.2 GHS Label elements

Signal word DANGER

**Pictograms** 





### **Hazard statements**

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.



### **Prevention statements**

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

### Response statements

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 CENTRE or doctor/physician.
P321 Specific treatment is advised - see first aid instructions.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage statements

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

#### **Disposal statements**

None allocated.

### 2.3 Other hazards

No information provided.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
PORTLAND CLINKER	65997-15-1	266-043-4	>87.5%
LIMESTONE (CALCIUM CARBONATE)	1317-65-3	215-279-6	<7.5%
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<0.1%
HEXAVALENT CHROMIUM	18540-29-9	-	<0.005%
ASHES (RESIDUES)	68131-74-8	268-627-4	<7.5%
SLAGS, FERROUS METAL, BLAST FURNACE	65996-69-2	266-002-0	<7.5%
GYPSUM	13397-24-5	603-783-2	<5%

**Ingredient Notes** 

- 1. Depending upon the source material, may contain varying amounts of respirable quartz (crystalline silica).
- 2. Chromium VI is a trace impurity in Portland Cement (< 50 ppm).

### 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

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.

Inhalation If inhaled, 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.

**First aid facilities** Eye wash facilities and safety shower should be available.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritating to the eyes, skin and respiratory system. 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.



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### 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 collect and place in suitable containers for reuse or disposal. Avoid generating dust.

#### 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.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from moisture, incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

### 7.3 Specific end uses

This product contains less than 1% crystalline silica and, therefore, is not considered a Crystalline Silica Substance as specified in Victoria's Occupational Health and Safety Amendment (Crystalline Silica) Regulations 2021, S.R. No. 137/2021.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

### **Exposure standards**

Ingredient	Reference	TWA		STEL	
	Kelerence	ppm	mg/m³	ppm	mg/m³
Calcium carbonate (Limestone, Marble, Whiting)	SWA [AUS]		10		
Chromium (VI) compounds (as Cr)	SWA [AUS]		0.05		
Gypsum (Calcium sulphate)	SWA [AUS]		10		
Portland cement	SWA [AUS]		10		
Quartz (respirable dust)	SWA [AUS]		0.05		

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### **Biological limits**

Ingredient	Reference	Determinant	Sampling Time	BEI
HEXAVALENT CHROMIUM	ACGIH BEI	Total chromium in urine	End of shift at end of workweek	25 µg/L
	ACGIH BEI	Total chromium in urine	Increase during shift	10 μg/L
	WEL [UK]	Total chromium in urine	Post shift	10 µmol chromium/mol creatinine in urine
	WES [NZ]	Total chromium in urine	End of shift at end of workweek	30 μg/L
	WES [Proposed]	Total chromium in urine	End of shift at end of workweek	25 μg/L

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction

ventilation is recommended. Maintain dust levels below the recommended exposure standard.

**PPE** 

**Eye / Face** Wear safety glasses or dust-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 and full-length trousers.

Respiratory Where an inhalation risk exists 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 FINE WHITE TO DARK GREY POWDER

Odour ODOURLESS
Flammability NON FLAMMABLE
Flash point NOT RELEVANT
Boiling point NOT AVAILABLE
Melting point > 1200°C

Melting point > 1200°C
Evaporation rate NOT AVAILABLE

**pH** 11 to 13

Vapour density NOT AVAILABLE Relative density 2.9 to 3.2

Relative density 2.9 to 3.2 Solubility (water) < 10 g/L

**NOT AVAILABLE** Vapour pressure **NOT RELEVANT** Upper explosion limit **NOT RELEVANT** Lower explosion limit Partition coefficient NOT AVAILABLE **Autoignition temperature NOT AVAILABLE Decomposition temperature NOT AVAILABLE Viscosity NOT AVAILABLE NOT AVAILABLE Explosive properties Oxidising properties NOT AVAILABLE Odour threshold NOT AVAILABLE** 

9.2 Other information

Bulk density 1100 kg/m³ to 1500 kg/m³

### 10. STABILITY AND REACTIVITY



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#### 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

Hazardous polymerisation is not expected to occur.

#### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

#### 10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), ethanol, acids (e.g. hydrofluoric acid) and interhalogens (e.g. chlorine trifluoride). Water contact may increase product temperature 2°C to 3°C.

#### 10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

### 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

No known toxicity data is available for this product. Based on available data, the classification criteria are not Acute toxicity

met.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
LIMESTONE (CALCIUM CARBONATE)	> 5000 mg/kg (rat)		

Skin Irritating to the skin. Contact with powder or wetted form may result in irritation, rash and dermatitis.

Eye Contact with moisture in the eyes may result in irritation, lacrimation, pain, redness, conjunctivitis and

possible alkaline burns aided by mechanical irritation and abrasion.

Not classified as causing respiratory sensitisation. However, some individuals may exhibit an allergic Sensitisation

response upon exposure to cement, possibly due to trace amounts of chromium.

Mutagenicity Insufficient data available to classify as a mutagen.

Carcinogenicity 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 Irritating to the respiratory system. Over exposure may result in irritation of the nose and throat, with

exposure

coughing. High level exposure may result in breathing difficulties.

STOT - repeated

exposure

Repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused by deposition in the lungs of fine respirable particles of crystalline silica. Principal

symptoms of silicosis are coughing and breathlessness. In the wet state, the likelihood of an inhalation

hazard is reduced.

**Aspiration** This product is a solid and aspiration hazards are not expected to occur.

### 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.

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#### 12.5 Other adverse effects

Avoid contamination of drains and waterways.

### 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Waste disposal Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust

generation and 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.

### 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

No information provided.

### 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 Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and

Labelling of Chemicals (GHS Revision 7).

Inventory listings AUSTRALIA: AllC (Australian Inventory of Industrial Chemicals)

All components are listed on AIIC, or are exempt.

### 16. OTHER INFORMATION

### **Additional information**

### 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.

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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/m³ 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

### 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.

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[ End of SDS ]



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## **Revision Information**

# **Revision History**

Revision	Date	Description
3.4	10/01/2023	Full SDS Review
3.3	27/06/2022	Full SDS Review
3.2	14/08/2020	Full SDS Review
3.1	02/11/2020	Full SDS Review
3	03/01/2020	Standard SDS Review
2	21/01/2015	Converted to GHS
1	26/08/2014	Initial SDS creation

### **Review Team**

SME Reviewers	Subject Matter
National Technical Manager - Cement	Quality
H&S Business Partner - Cement	Health & Safety
Environmental Sustainability Manager, Cement	Environment & Community
Mobile Asset Manager - Cement	Transport & Dangerous Goods
National Health & Hygiene Manager	Health & Hygiene
National Technical Manager - Cement	Product Custodian