Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name ZEP CEMENT

Synonyms

1.2 Uses and uses advised against

Uses CONCRETE • GROUT • MANUFACTURE OF CEMENTS • MANUFACTURE OF MORTAR & GROUT •

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 http://www.boral.com.au

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/hearing protection.

ChemAlert.

PRODUCT NAME ZEP CEMENT

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.

P405 Store locked up.

Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<0.1%
SLAGS, FERROUS METAL, BLAST FURNACE	65996-69-2	266-002-0	>60%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	<10%
GYPSUM	13397-24-5	603-783-2	<5%

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.

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.

Page 2 of 6 SDS Date: 14 Jul 2023
Revision No: 3.2



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	
Ingredient	Neierence	ppm	mg/m³	ppm	mg/m³
Gypsum (Calcium sulphate)	SWA [AUS]		10		
Quartz (respirable dust)	SWA [AUS]		0.05		

Biological limits

No biological limit values have been entered for this product.

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



PRODUCT NAME ZEP CEMENT

9.1 Information on basic physical and chemical properties

Appearance FINE OFF-WHITE TO DARK GREY POWDER

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

Evaporation rate NOT AVAILABLE

pH 11 to 13

Vapour density NOT AVAILABLE

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

NOT AVAILABLE Vapour pressure 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 **Explosive properties** NOT AVAILABLE **Oxidising properties NOT AVAILABLE Odour threshold NOT AVAILABLE**

9.2 Other information

Bulk density 1100 kg/m³ to 1550 kg/m³

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

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

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 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.

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.

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.



PRODUCT NAME ZEP CEMENT

STOT - single exposure

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

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.

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).

Dispose of in accordance with relevant local legislation. 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

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Poison schedule

Uniform Scheduling of Medicines and Poisons (SUSMP).

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

Labelling of Chemicals (GHS Revision 7).

ChemAlert.

PRODUCT NAME ZEP CEMENT

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.

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.

Prepared by Ri

Risk Management Technologies 5 Ventnor Ave, West Perth Western Australia 6005 Phone: +61 8 9322 1711 Fax: +61 8 9322 1794

Fax: +61 8 9322 1794 Email: info@rmt.com.au Web: www.rmtglobal.com

[End of SDS]



Revision Information

Revision History

Revision	Date	Description
3.2	14/07/2023	Full SDS Review
3.1	27/06/2022	Full SDS Review

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

Revision Table Section 16 Addendum Updated: 14/07/2020 / CA