## SAFETY DATA SHEET

# **High Alumina Cement**

## Section 1: Identification of the Material and Supplier

### **Company Details**

**Cement Australia Pty Limited** 

ABN 75 104 053 474

18 Station Avenue Darra, Queensland 4076 Tel: 1300 CEMENT (1300 236 368)
Fax: 1800 CEMENT (1800 236 368)
Website: www.cementaustralia.com.au

**Emergency Contact Number:** Contact Person: Technical Manager

Telephone: 1300 CEMENT (1300 236 368 - Business Hours) or

Poisons Information Centre 13 11 26

**SDS Supplier** 

Cement Australia 18 Station Avenue, Darra QLD 4076

**Product** 

Name: High Alumina Cement (Type GP)

Other Names: Refractory Cement, Cement Accelerant

**Use:** Used as a binder in concrete, concrete masonry, mortar and grouts.

This SDS reflects the handling of Cement Powder in bulk or bagged form. Adding water to Cement changes the properties and the SDS for those products listed above

should be referenced.

\* AS3972 prescribes whether the cement conforms to these specific sub-categories.

### **Section 2: Hazards Identification**

### **GHS CLASSIFICATION**

**Classified as Hazardous** according to the Safe Work Australia guidelines for Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

**Not classified as Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

The properties of Cement change when water is added. See SDS for Wet Concrete.

#### Label elements

GHS label elements Not Applicable

#### SIGNAL WORD

**NOT APPLICABLE** 

For more information call **1300 CEMENT** (1300 236 368) or visit **www.cementaustralia.com.au** 





#### **Hazard statement(s)**

Not Applicable

#### **Prevention Statement(s)**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

**P103** Read carefully and follow instructions before use.

**P261** Avoid breathing dust.

**P264** Wash any skin exposed to the product thoroughly after handling.

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

**P280** Wear protective gloves in accordance with AS2161. Wear eye protection in accordance

with (AS/NZS1337.1).

#### Response Statement(s)

P310 Immediately call POISON CENTRE 131126 or Doctor if you feel unwell.

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

P304+P340 IF INHALED: Remove affected person to fresh air and keep at rest in a position

comfortable for breathing

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If feeling unwell, get medical

attention showing the SDS and label.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do so. Continue rinsing.

#### **Storage Statement(s)**

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

#### **Disposal Statement(s)**

P501 Dispose of unused contents or container as normal general waste or in accordance with

jurisdictional regulations

#### 2.3 Other hazards

No information provided.

# **Section 3: Composition/Information on Ingredients**

High Alumina Cement consists of a crystalline mass manufactured from substances mined from the earth's crust. It contains trace amounts of naturally occurring, but potentially hazardous chemical entities including metals such as chromium and nickel. All significant constituents are listed below:

Chemical Entity Proportion CAS Number

Calcium Aluminate Cement <99.5% 65997-16-2, 12042-68-1

#### **Section 4: First Aid Measures**

### 4.1 Description of first aid measures

**Eyes:** 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 Poison 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. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. 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.

## **Section 5: Fire Fighting Measures**

Fire/Explosion Hazard:

None

Special Protective Precautions

None

Hazchem Code:

None allocated

None allocated

None allocated

Flammability: Not flammable Extinguishing Media: None required

Hazards from Combustion Products: None

### Section 6: Accidental Release Measures

Spills: Spills are best cleaned up by vacuum device to avoid generating airborne dust.

Recommendations on Exposure Control and Personal Protection should be followed during

spill clean-up.

Keep product out of storm water and sewer drains.

Wetting during clean-up will cause formation of setting cement.

# **Section 7: Handling and Storage**

**Handling:** When supplied in bags these need to be handled in accordance with Hazardous Manual

Tasks Code of Practice.

Storage: Protect from moisture to prevent hardening. Storage of cement may be in concrete silos, steel

bins, or plastic lined multi-ply paper bags.

# **Section 8: Exposure Controls/Personal Protection**

### 8.1 Control parameters

#### **Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
High Alumina Cement	SWA (AUS)		Not Available		



### 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** 

Eyes / Face: Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

Body/Skin: Wear long sleeved shirt and full-length trousers.

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

Respiratory: Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-

specific risk assessment.

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

**Appearance:** A fine powder ranging in colour from grey to off-white

Odour: No distinctive odour

Boiling/Melting Point: Melting point >1200°C

Vapour Pressure: Not applicable

Specific Gravity: 3.0 – 3.2

Flash Point: Non-applicable Flammability Limits: Not applicable

Solubility in Water: Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH >11)

Particle Size: Up to 50% of the fresh dry material may be respirable (below 10 microns)

# **Section 10: Stability and Reactivity**

Chemical Stability: Chemically stable

Conditions to Avoid: Keep free of moisture

Incompatible Materials: None
Hazardous Decomposition Products: None

Hazardous Reactions:

A corrosive substance harmful to exposed skin is the result of water

addition to the point of creating a paste or slurry. See SDS for Wet

Concrete.

# **Section 11: Toxicological Information**

High Alumina Cements are stable substances, compatible with most other building materials, will not decompose into hazardous by-products and do not polymerise.

# **Short Term (Acute) Exposure**

Swallowed: Unlikely under normal industrial use. Mildly abrasive and corrosive to mouth and throat if

swallowed. May cause nausea, stomach cramps and constipation.

Eyes: Irritating and corrosive to the eyes and may cause alkaline burns. Cement dust is irritating to

the eyes. Exposure to dust may aggravate existing eye irritations.



Skin: Dust is irritating and drying to the skin. Direct contact with wet cement may cause serious skin

burns. Within 12 to 48 hours (after one- to six-hour exposures) possible first, second- or third-degree burns may occur. There may be no obvious pain at the time of the exposure. Chronic

skin disorders may be aggravated by exposure to dust or contact with wet cement.

**Inhalation:** Cement dust is irritating to the nose, throat and respiratory tract causing coughing and

sneezing.

Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be

aggravated.

### Long Term (Chronic) Exposure

**Eyes:** Dust may cause irritation and inflammation of the cornea.

Skin: Repeated contact causes irritation and drying of the skin and can result in skin reddening and

skin rash (dermatitis). Over time this may become chronic and can also become infected. Persons who are allergic to chromium may develop an allergic dermatitis which aggravates the irritant effects and this combination can lead to chronic cement dermatitis and serious disability

particularly affecting the hands.

Of the ingredients, Water soluble Hexavalent Chromium (Cr VI) is not classified as a carcinogen

by the Hazardous Chemical Information System (HCIS); may trigger skin sensitisation issues in

some users.

**Inhalation:** Repeated exposure to the dust may result in increased nasal and respiratory secretions and

coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure

to high levels of dust, with increased risk of bronchitis and pneumonia.

Repeated and prolonged exposure to dust levels which exceed the OES for crystalline silica

(see above) may occur. This can cause bronchitis, and silicosis (scarring of the lung).

## **Section 12: Ecological Information**

**Ecotoxicity:** Product forms an alkaline slurry when mixed with water.

**Bio accumulative potential:** This product is not expected to bioaccumulate.

Persistence and Degradability: Product is persistent and would have a low degradability.

Mobility: A low mobility would be expected in a landfill situation.

# **Section 13: Disposal Considerations**

High Alumina Cement can be treated as a common waste for disposal or dumped into a landfill site, in accordance with local authority guidelines.

Keep material out of storm water and sewer drains.

Measures should be taken to prevent dust generation during disposal, and exposure and personal precautions should be observed (see above)

# **Section 14: Transport Information**

May be transported by Ship, Rail, Air and Road.

UN Number:

Proper Shipping Name:

Class and Subsidiary Risk:

None allocated

None allocated

None allocated

**Special precautions for user:** Avoid generating and breathing dust



Hazchem Code: None allocated

# **Section 15: Regulatory Information**

High Alumina Cement is not classified as Dangerous Goods.

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS)

#### Section 16: Other Information

For further information on this Telephone: 1300 CEMENT (1300 236 368 - Business Hours)

product contact: Facsimile: 1800 CEMENT (1800 236 368)

Previous Edition and edits made:

2020 - Format updates

2022/2023 - Format updates

Next Review Date for this MSDS: 31 December 2026.

#### Australian and New Zealand Standards:

AS 2161: Industrial Safety Gloves and Mittens (excluding electrical and medical gloves).

AS/NZ 1336: Recommended Practices for Occupational Eye Protection.

AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.

AS/NZS 1716: Respiratory protective devices.

AS/NZS 4501: Occupational protective clothing.

#### **Advice Note:**

Cement Australia believes the information in this document to be accurate as at the date of preparation, but, to the maximum extent permitted by law, Cement Australia accepts no responsibility for any loss or damage caused by any person acting or refraining from action because of this information.

The provision of this information should not be construed by anyone as a recommendation to use this product. No one should use any product in violation of any patent or other intellectual proprietary rights or in breach of any statute or regulation.

Users should rely on their own knowledge and inquiries and make their own determination as to the applicability of this information in relation to their particular purposes and specific circumstances. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

[SDS Ends]

