

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

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

Hazardous Substance. Non-dangerous Goods

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

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Continued...

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or visit www.cementaustralia.com.au

Mix it with the best.



Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

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

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 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 and equipment for fire fighters:	None required
Hazchem Code:	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/m ³	ppm	mg/m ³
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

- 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.

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.
Inhaled:	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.
Inhaled:	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:	None allocated
Proper Shipping Name:	None allocated
Class and Subsidiary Risk:	None allocated
Packing Group:	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 product contact: **Telephone:** 1300 CEMENT (1300 236 368 - Business Hours)
Facsimile: 1800 CEMENT (1800 236 368)

Next Review Date for this SDS: 31 December 2024.

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.

[End SDS]