

SAFETY DATA SHEET

Fly Ash – Bottom Ash

Section 1: Identification of the Material and Supplier

Company Details

Cement Australia Pty Limited

ABN 75 104 053 474

18 Station Avenue
Darra, Queensland 4076Tel: 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

Manufacturing Plants

Gladstone Power Station:

Port Curtis Way, Callemondah Queensland 4680

Callide Power Station:

Callide Dam Road, Mt Murchison Queensland 4715

Flyash Australia Pty Ltd:

Eraring, Bayswater and Mt Piper Power Stations. 12 Tryon Road, Lindfield New South
Wales 2070

Product

Name: Fly Ash

Other Names: Furnace Ash
Fly Ash

Use: Supplementary cementitious material for concrete. Also, used in soil stabilisation and as a fine filler in asphalt and other products.

Section 2: Hazards Identification

Hazardous Substance. Non-dangerous Goods

Warning: Causes skin irritation

Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled



CAN CAUSE SKIN IRRITATION & EYE DAMAGE: Avoid contact with the eyes and skin from both wet and dry powder. Wet powder may cause skin sensitisation (dermatitis). Safety: Wear suitable protective clothing, gloves (AS2161), and eye/face protection (AS/NZS1337.1).

IF ON SKIN: Wash thoroughly after handling. Wash clothes before re-use and separately from other clothing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

RESPIRATORY SENSITISERS: Avoid breathing dust. Repeated inhalation of the dust containing crystalline silica may cause bronchitis, silicosis (scarring of the lung) and the risk of scleroderma. Safety: When exposed to dust, wear a suitable respirator (AS/NZS1715, 1716). When cutting or abrading concrete, keep it wet to avoid creating hazardous dust.

IF INHALED: Remove victim to fresh air immediately and keep at rest in a comfortable position for breathing.

SAFETY EQUIPMENT: Recommended protective clothing when handling product includes gloves, boots, long sleeves/pants, eye protection i.e., goggles, face mask.

For more information call 1300 CEMENT (1300 236 368)
or visit www.cementaustralia.com.au*Mix it with the best.*

FIRST AID: If any above symptoms persist, seek medical attention or contact Poisons Information Centre on 13 11 26 (Australia wide).

DISPOSAL: Follow safety instructions and collect in containers for disposal as trade waste in accordance with local authority guidelines. Please dispose of packaging in appropriate general waste collection (not suitable for recycling).

SPILLS/LEAKS: Keep out of sewers and stormwater.

Section 3: Composition/Information on Ingredients

Fly Ash composition

Chemical Entity	Proportion	CAS Number
Fly Ash	100%	68131-74-8
Crystalline Silica (Quartz)	Up to 20%	14808-60-7
Mullite	5-30%	1302-93-8
Hexavalent Chromium Cr (VI)	<1ppm	1309-48-4

Note: It should be assumed that silica content is sufficient to create a silica hazard in work conditions where fine dust becomes airborne.

Section 4: First Aid Measures

Swallowed:	Wash mouth with water. Give plenty of water to drink. Do not induce vomiting. Seek medical advice if symptoms persist.
Eyes:	Flush thoroughly with flowing water for 15 minutes to remove all traces. If symptoms or irritation persist, seek medical attention.
Skin:	Wash with soap and water. Remove and wash affected clothing before reuse.
Inhaled:	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
First Aid Facilities:	Eye wash station.
Advice to Doctor:	Treat symptomatically

Section 5: Fire Fighting Measures

Fire/Explosion Hazard:	None
Hazchem Code:	None allocated
Flammability:	Not flammable
Extinguishing Media:	None required
Hazards from Combustion Products:	None
Special Protective Precautions and equipment for fire fighters:	None

Section 6: Accidental Release Measures

Spills:	A fine water spray should be used to suppress dust when sweeping. Wet sweep or vacuum dust with industrial vacuum cleaner.
Clean up Procedure	Work areas should be cleaned regularly by wet sweeping or vacuuming. Collect in containers and dispose of as trade waste in accordance with local authority guidelines. Keep out of stormwater and sewer drains. Personal protection recommendations should be followed – see Section 8.

Section 7: Handling and Storage

Storage:	Keep in a dry place.
Conditions of safe storage:	When handled pneumatically use standard dust filters on vehicles and silos.
Incompatibilities:	None

Section 8: Exposure Controls/Personal Protection

Exposure Limits:	National Occupational Health & Safety Commission (NOHSC) Australia Occupational Exposure Standard: Exposure to dust should be kept as low as practicable, and below the following OES. Crystalline silica (quartz): 0.1 mg/m ³ TWA as respirable dust (≤7 microns particle equivalent aerodynamic diameter). Dust (NOS - not otherwise specified): 10 mg/m ³ TWA as inspirable dust.
Engineering Controls:	Avoid generating dust. Keep exposure to dust as low as practicable. Work areas should be cleaned regularly by wet sweeping or vacuuming. If generating dust cannot be avoided, follow personal protection recommendations below. When handling fly ash, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. For bulk deliveries, closed pumping systems are recommended. For handling of individual bags, follow instructions above if no local exhaust ventilation is available.
Personal Protection	
Skin:	Wear loose comfortable full-length clothing i.e. long sleeves and trousers. Wash work clothes regularly. Wear cotton or light duty leather gloves or equivalent (AS 2161).
Eyes:	Safety spectacles with side shields or safety goggles (dust resistant: AS/NZS 1336) should be worn if dust likely to be generated.
Respiratory:	Where engineering and handling controls are not adequate to minimise exposure to total dust and to respirable crystalline silica wear a suitable P1 or P2 particulate respirator (AS/NZS 1715 and AS/NZS 1716). Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly. For dust levels approaching or exceeding the NES (see above) a more effective particulate respirator as described in AS/NZS 1715 should be worn. Procedures for effective use of respirators should be applied and supervised.

Section 9: Physical and Chemical Properties

Appearance:	Fine powder – light grey to fawn
Odour:	No odour
Boiling/Melting Point:	Melting point >1400°C
Vapour Pressure:	Not applicable
Specific Gravity:	2.35 - 2.40
Flash Point:	Not flammable
Flammability Limits:	Not applicable
Solubility In Water:	Essentially insoluble
Particle Size:	Approximately 40% of particles are respirable (≤7 micron in diameter)

Section 10: Stability and Reactivity

Chemical Stability:	Chemically stable
Conditions to Avoid:	None
Incompatible Materials:	None
Hazardous Decomposition Products:	None
Hazardous Reactions:	None

Section 11: Toxicological Information

No acute toxicity data is available for this class of material.

Short Term (Acute) Exposure

Swallowed:	Swallowing fly ash in any significant amount is unlikely under normal conditions of use. Ingestion of large amounts may cause abdominal discomfort.
Eyes:	Irritating to eyes causing watering and redness.
Skin:	Mildly irritating to skin - can cause irritant dermatitis.
Inhaled:	Irritating to the nose, throat and respiratory tract causing coughing and sneezing.

Long Term (Chronic) Exposure

Skin:	Repeated heavy contamination of skin, particularly where sweating and abrasion also occurs may cause chronic localised dermatitis which may lead to secondary infection.
Inhaled:	<p>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.</p> <p>Repeated and prolonged exposure to dust levels which exceed the OES for crystalline silica (see above) can cause bronchitis, and silicosis (scarring of the lung). Long-term overexposure to respirable crystalline silica dust may increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs).</p> <p>NOHSC has not classified crystalline silica as a carcinogen. There is debate in the medical literature concerning whether there is any risk of lung cancer arising from long term high overexposure to respirable crystalline silica. Risk of lung cancer has not been identified from using this product. The International Agency for Research on Cancer (IARC) has classified Crystalline Silica inhaled in the form of quartz or Cristobalite from occupational sources, as carcinogenic to humans (Group 1).</p>

Section 12: Ecological Information

Ecotoxicity:	Unlikely to have a negative impact on plant life or animals.
Persistence and Degradability:	Product is persistent and would have a low degradability.
Mobility:	A low mobility would be expected in a landfill setting.

Section 13: Disposal Considerations

Follow personal protection safety requirements. Collect in containers and dispose as trade waste and land fill in accordance with local authority guidelines. Keep out of stormwater and sewer drains.
