

# Material Safety Data Sheet (MSDS)



MSDS No. CA o8

## Fly Ash – Tarong

### Section 1: Identification of the Material and Supplier

#### Company Details:

Cement Australia Pty Limited

ABN 75 104 053 474

Level 19

111 Pacific Highway

North Sydney, NSW 2060

Tel: 02 9956 8811

Fax: 02 9956 7311

Website: [www.cemaust.com.au](http://www.cemaust.com.au)

**Product:** Fly Ash – Tarong

**Other Names:** Pozzolanic Fly Ash

Pulverised Fuel 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

#### Risk Phrases

**R36/37/38:** Irritating to eyes, respiratory system and skin.

**R48/20:** Danger of serious damage to health by prolonged exposure through inhalation.

#### Safety Phrases

**S22:** Do not breathe dust.

**S24/25:** Avoid contact with skin and eyes.

**S36/37/39:** Wear suitable protective clothing, gloves and eye/face protection.

**S38:** In case of insufficient ventilation wear suitable respiratory equipment.

### Section 3: Composition/Information on Ingredients

Fly Ash conglomerate composition

Chemical Entity	Proportion	CAS Number
Fly Ash	100%	68131-74-8
Crystalline Silica (Quartz)	up to 30 %	14808-60-7
Mullite	5-30%	1302-93-8
Hexavalent Chromium (Chrome 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 Procedures:	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 for Safe storage:	When handled pneumatically use standard dust filters on vehicles and silos.
Incompatibilities:	None

## Section 8: Exposure Controls/Personal Protection

Exposure Limits:	<b>National Occupational Health &amp; Safety Commission (NOHSC) Australia Occupational Exposure Standard:</b>  Exposure to dust should be kept as low as practicable and below the following OES: Crystalline Silica (Quartz): 0.1 mg/m <sup>3</sup> TWA (time-weighted average) as respirable dust (≤ 7 micron particle equivalent aerodynamic diameter). Dust (NOS - not otherwise specified): 10 mg/m <sup>3</sup> TWA as inspirable dust.
------------------	---

## Section 8: Exposure Controls/Personal Protection (Cont'd)

**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 to dark grey in colour

**Odour:** No odour

**Boiling/Melting Point:** Melting point >1400°C

**Vapour Pressure:** Not applicable

**Specific Gravity:** 2.1

**Flash Point:** Not flammable

**Flammability Limits:** Not applicable

**Solubility In Water:** Essentially insoluble

**Particle Size:** Approximately 20% - 40% of particles are respirable ( $\leq 7$  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

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

### Long Term (Chronic) Exposure

<b>Skin:</b>	Repeated heavy contamination of skin, particularly where sweating and abrasion also occurs may cause chronic localised dermatitis which may lead to secondary infection.
<b>Inhaled:</b>	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) 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).  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).

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Unlikely to have a negative impact on plant life or animals.
<b>Persistence and Degradability:</b>	Product is persistent and would have a low degradability.
<b>Mobility:</b>	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.

## Section 14: Transport Information

UN Number:	None allocated
Proper Shipping Name:	None allocated
Class and Subsidiary Risk:	Not applicable
Packing Group:	None allocated
Special precautions for user:	Avoid generating and breathing dust
Hazchem Code:	None allocated

---

## Section 15: Regulatory Information

Classified as non-Dangerous Goods.

Classified as Hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC: 1008] 3rd Edition

Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State) as they are applicable to Respirable Crystalline Silica; requiring exposure assessment, controls and health surveillance (NOHSC).

**Poisons Schedule:** None allocated

---

## Section 16: Other Information

**For further information on this product contact:** Telephone: 1800 263757 (24 hrs)  
Facsimile: 07 3335 3225

**Emergency Contact Number:** Telephone: 1800 263757 (24 hrs)  
or Poisons Information Centre 13 11 26

### 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:

The information in this document is believed to be accurate.

The provision of this information should not be construed as a recommendation to use this product in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability 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.

Since the information in this document may be applied under conditions beyond our control, we can accept no responsibility for any loss or damage caused by any person acting or refraining from action because of this information.