SAFETY DATA SHEET

Fly 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 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

Manufacturing Plants

Gladstone Power Station:	Port Curtis Way, Callemondah Queensland 4680
Callide Power Station:	Callide Dam Road, Mt Murchison Queensland 4715
Stanwell Power Station:	Switchyard Road, Stanwell QLD 4702
Flyash Australia Pty Ltd:	Eraring, Bayswater and Mt Piper Power Stations. Head Office - 12 Tryon Road, Lindfield New South Wales 2070

Product

Name: **Fly Ash**

Other Names:

Gladstone Ash
Callide Ash
Melbourne Ash (Blend of Gladstone and Callide Ash)
Central Queensland Ash (Blend of Gladstone and Callide Ash)
North Queensland Ash (Blend of various QLD Ash sources)
NSW Ash (Blend of Gladstone and Callide Ash)
Kaolite High Performance Ash (HPA, Special Grade Fly Ash, Ultrafine Fly Ash)
Sydney Ash (Blend of Eraring and Mt Piper Ash and/or Bayswater Ash)

Use:

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

Fly Ash (CAS - 68131-74-8) composition varies based on the Source Coal used at various power stations. These numbers reflect the various ranges in composition and the SDS covers the highest GHS rating based on the product with the highest concentration.

Section 2: Hazards Identification

Hazardous Substance. Non-dangerous Goods

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2
Serious Eye Damage / Eye Irritation: Category 2A
Skin Corrosion/Irritation: Category 2
Specific Target Organ Systemic Toxicity (Single Exposure): Category 3

DANGER

Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure (lungs).

Prevention statement(s)

P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection rated for Dust.
P260 + P261	Avoid/Do not breathe dust. Cement can become easily airborne.

Response statement(s)

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P305	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and
P337 + P313	easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
P314 + P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P362	Take off contaminated clothing and wash before re-use.

Storage statement(s)

P403 + P233	Store in a well-ventilated place.
P405	Keep container tightly closed. Store locked up.

Disposal statement(s)

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

Section 3: Composition/Information on Ingredients

Fly Ash (CAS - 68131-74-8) composition varies based on the Source Coal used at power station. These numbers reflect the various ranges in composition and the SDS covers the highest GHS rating based on the product with the highest concentration.

Chemical Entity	Proportion	CAS Number
Mullite	5-30%	1302-93-8
Crystalline Silica (Quartz)	<5.0%	14808-60-7
Hexavalent Chromium Cr (VI)	<1ppm	18540-29-9

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

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Silica – Crystalline Quartz (respirable dust)	SWA (AUS)	--	0.1	--	--
Chromium (VI) compounds (as Cr)	SWA (AUS)	--	0.05	--	--

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:	Fine powder – light grey to fawn
Odour:	No odour
Boiling/Melting Point:	Melting point >1400ºC
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

Acute toxicity	Has a caustic reaction and is corrosive to the mouth and throat.
Skin	Irritating to the skin. Contact with powder or wetted form may result in caustic reaction, rash and dermatitis.
Eye	Irritation and corrosive to the eyes. May cause chemical conjunctivitis and redness and watering of eyes and damage to cornea.
Sensitization	Irritating and drying to the skin. May cause alkali burns and irritant or allergic dermatitis.
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.
Reproductive	Insufficient data available to classify as a reproductive toxin.
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 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.

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.

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 per the criteria of the National Occupational Health and Safety Commission (NOHSC) Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008] 3rd Edition

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)

Previous Edition: 2014 – GHS Compliance edits made and supplementary compliance edits added.

Next Review Date for this MSDS: 31 December 2020.

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 noted below, 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.