

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name

BAYSWATER FLYASH

Synonym(s) BAYSWATER FLY ASH • FLYASH

1.2 Uses and uses advised against

Use(s)

CEMENT ADDITIVE • CONCRETE ADDITIVE • GROUT ADDITIVE • MORTAR ADDITIVE • ROAD BASE ADDITIVE • SOIL STABILISATION

1.3 Details of the supplier of the product

Supplier name	FLYASH AUSTRALIA PTY LTD
Address	Suite 18, 12 Tryon Road, Lindfield, NSW, 2070, AUSTRALIA
Telephone	02 9413 8422
Fax	02 9413 8432
Email	Lindfield@flyash.com.au
Website	www.flyashaustralia.com.au

1.4 Emergency telephone number(s)

Emergency

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

13 11 26 (PIC)

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

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

2.2 Label elements

Signal word Pictogram(s)

WARNING



Hazard statement(s)

ugh prolonged or repeated exposure.

Prevention statement(s)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s) P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/attention 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. Keep container tightly closed. P405 Store locked up. **Disposal statement(s)** P501 Dispose of contents/container in accordance with relevant regulations. 2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	8%
SILICA, AMORPHOUS	7631-86-9	231-545-4	30 to 60%
ALUMINOSILICATE	1302-93-8	215-113-2	10 to 30%

Ingredient Notes Approximately 30% of particles in the bulk material (fly ash) are in the respirable dust fraction. The crystalline silica content in the respirable dust proportion of this component is 10%.

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).

First aid facilities Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 5 microns penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on x-ray. Exposed workers should be medically examined regularly with emphasis on respiratory system. Individuals with pulmonary disease should be excluded from exposure.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
ingreatent	Reference	ppm	mg/m³	ppm	mg/m³
Fumed silica (respirable dust)	SWA (AUS)		2		
Nuisance Dust	SWA (AUS)		10		
Quartz (respirable dust)	SWA (AUS)		0.1		

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Wet where possible. Maintain dust levels below the recommended exposure standard.

PPE

Wear dust-proof goggles.
Wear PVC or rubber gloves.
Wear coveralls.
Where an inhalation risk exists, wear a Class P2 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	FINE GREY POWDER
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	1400°C (Approximately)
Evaporation rate	NOT AVAILABLE
рН	10.4
Vapour density	NOT AVAILABLE
Specific gravity	2.2 (Approximately)
Solubility (water)	SLIGHTLY SOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures > 870°C.

10.5 Incompatible materials

Incompatible with acids (e.g. nitric acid) and alkalis (e.g. sodium hydroxide). Avoid contact with oxidising agents (e.g. hypochlorites), hydrogen fluoride, oxygen difluoride, chlorine trifluoride, manganese trifluoride, fluorine, manganese trioxide, chlorine trioxide, concentrated phosphoric acid, vinyl acetate.

10.6 Hazardous decomposition products

Crystalline silica may form after the product is exposed to extended periods of high temperatures (> 900°C).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Information available for the product:

No known toxicity data is available for this product. Based on available data, the classification criteria are not met.

Information available for the ingredient(s):

Ingredient		Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
SILICA, AMORPHOUS	3	3160 mg/kg (rat)		
Skin	Contact may result in irritation, redness, pain and rash.			
Eye	Contact may result in irritation, lacrimation, pain and redness.			

Sensitization Not classified as causing skin or respiratory sensitisation.

Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	Not classified as a carcinogen. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). However, there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis.
Reproductive	Insufficient data available to classify as a reproductive toxin.
STOT – single exposure	Over exposure may result in irritation of the nose and throat, with coughing.
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.
Aspiration	Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information provided.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	None Allocated	None Allocated
14.2 Proper Shipping Name	None Allocated	None Allocated	None Allocated
14.3 Transport hazard class	None Allocated	None Allocated	None Allocated
14.4 Packing Group	None Allocated	None Allocated	None Allocated

14.5 Environmental hazards No information provided

14.6 Special precautions for user

Hazchem code None Allocated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

ChemAlert.

Poison schedule

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)]. Irritant Hazard codes Xi Xn Harmful R36/37/38 **Risk phrases** Irritating to eyes, respiratory system and skin. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. S21 When using, do not smoke. Safety phrases S22 Do not breathe dust. S24/25 Avoid contact with skin and eyes. \$38 In case of insufficient ventilation, wear suitable respiratory equipment. AUSTRALIA: AICS (Australian Inventory of Chemical Substances) Inventory listing(s) All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information ALUMINO SILICATES: When alumino silicates have been exposed to service temperatures exceeding 982°C for prolonged periods, cristobalite, a form of crystalline silica may be formed. Exposure to cristobalite dust may cause pulmonary fibrosis-silicosis. A hazard is only anticipated during demolition of used refractory materials. Cristobalite is classified as carcinogenic to humans (IARC Group 1).

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.



Abbreviations	ACGIH CAS # CNS EC No. EMS	American Conference of Governmental Industrial Hygienists Chemical Abstract Service number - used to uniquely identify chemical compounds Central Nervous System EC No - European Community Number Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous
	GHS GTEPG IARC LC50 LD50 mg/m ³ OEL pH STEL STOT-RE STOT-RE STOT-SE SUSMP SWA TLV TWA	Goods) Globally Harmonized System Group Text Emergency Procedure Guide International Agency for Research on Cancer Lethal Concentration, 50% / Median Lethal Concentration Lethal Dose, 50% / Median Lethal Dose Milligrams per Cubic Metre Occupational Exposure Limit relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). Parts Per Million Short-Term Exposure Limit Specific target organ toxicity (repeated exposure) Specific target organ toxicity (single exposure) Standard for the Uniform Scheduling of Medicines and Poisons Safe Work Australia Threshold Limit Value Time Weighted Average
Report status		It has been compiled by RMT on behalf of the manufacturer, importer or supplier of the erves as their Safety Data Sheet ('SDS').
	manufacturer, the current sta at the time of	on information concerning the product which has been provided to RMT by the importer or supplier or obtained from third party sources and is believed to represent ate of knowledge as to the appropriate safety and handling precautions for the product f issue. Further clarification regarding any aspect of the product should be obtained he manufacturer, importer or supplier.
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