

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name MT. PIPER FLYASH

Synonym(s) 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 <u>Lindfield@flyash.com.au</u>

Website www.flyashaustralia.com.au

1.4 Emergency telephone number(s)

Emergency 13 11 26 (PIC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s) Specific Target Organ Systemic Toxicity (Single Exposure): Category 3

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

Page 1 of 7

Serious Eye Damage / Eye Irritation: Category 2A

Skin Corrosion/Irritation: Category 2

2.2 Label elements

Signal word WARNING

Pictogram(s)





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.

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.



SDS Date: 19 Feb 2016

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	5%
FLY ASH	68131-74-8	268-627-4	>60%
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 7%.

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).

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. Amorphous silica may transform at elevated temperatures to tridymite (870°C) or cristobalite (1470°C).

Page 2 of 7

ChemAlert.

SDS Date: 19 Feb 2016

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	
		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		

Page 3 of 7

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.



SDS Date: 19 Feb 2016

PPE

Eye / Face Wear dust-proof goggles. **Hands** Wear PVC or rubber gloves.

Body Wear coveralls.

Respiratory 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

pH 4.9

Vapour density NOT AVAILABLE

Specific gravity 2.1

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 NOT AVAILABLE Viscosity 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.

Page 4 of 7

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



SDS Date: 19 Feb 2016

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	Dermal Toxicity	Inhalation Toxicity
	(LD50)	(LD50)	(LC50)
SILICA, AMORPHOUS	3160 mg/kg (rat)		

SkinContact may result in irritation, redness, pain and rash.EyeContact may result in irritation, lacrimation, pain and redness.SensitizationNot classified as causing skin or respiratory sensitisation.

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

Mutagenicity

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.

Insufficient data available to classify as a mutagen.

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

Page 5 of 7

landfill. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA



SDS Date: 19 Feb 2016

	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

Poison schedule 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).

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)].

Hazard codes Xi Irritant

Xn Harmful

Risk phrases R36/37/38 Irritating to eyes, respiratory system and skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases S21 When using, do not smoke.

S22 Do not breathe dust.

S24/25 Avoid contact with skin and eyes.

S38 In case of insufficient ventilation, wear suitable respiratory equipment.

Inventory listing(s) AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

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.



SDS Date: 19 Feb 2016 Version No: 2

Page 6 of 7

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 American Conference of Governmental Industrial Hygienists

CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds

CNS Central Nervous System

EC No. EC No - European Community Number

EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous

Goods)

GHS Globally Harmonized System

GTEPG Group Text Emergency Procedure Guide
IARC International Agency for Research on Cancer

LC50 Lethal Concentration, 50% / Median Lethal Concentration

LD50 Lethal Dose, 50% / Median Lethal Dose

mg/m³ Milligrams per Cubic Metre
OEL Occupational Exposure Limit

pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly

alkaline).

ppm Parts Per Million

STEL Short-Term Exposure Limit

STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

SWA Safe Work Australia
TLV Threshold Limit Value
TWA Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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Prepared by

Risk Management Technologies 5 Ventnor Ave, West Perth Western Australia 6005 Phone: +61 8 9322 1711 Fax: +61 8 9322 1794 Email: info@rmt.com.au Web: www.rmt.com.au.

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Page 7 of 7



SDS Date: 19 Feb 2016