

SAFETY DATA SHEET

Product Name MILL FLY ASH

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier name	WILMAR SUGAR
Address	Upper level 5-21, Denham St, Townsville, QLD, 4810
Telephone	+61 7 4722 1972
Fax	+61 7 4724 5715
Emergency	13 11 26
Email	info@wilmar.com.au
Web site	http://www.wilmar-international.com/our-business/sugar/safety-health-environment/
Synonym(s)	FLY ASH • WILMAR MILL FLY ASH
Use(s)	ADDITIVE • COMPOST • SOIL TREATMENT
SDS date	27 November 2013

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

RISK PHRASES R48/20	Harmful: 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.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S22 S24/25	Avoid contact with skin and eyes.

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN number	None Allocated	DG class	None Allocated
Packing group	None Allocated	Subsidiary risk(s)	None Allocated
Hazchem code	None Allocated		

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Identification	Classification	Content
QUARTZ (SILICA CRYSTALLINE)	CAS: 14808-60-7 EC: 238-878-4	Not Available	20 to 25%
TRACE ELEMENTS	Not Available	Not Available	2 to 3%
ORGANIC COMPOUNDS	Not Available	Not Available	Not Available
WATER	CAS: 7732-18-5 EC: 231-791-2	Not Available	Not Available

4. 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 Skin If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. 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.

ChemAlert.

Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
Advice to doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve toxic gases if strongly heated.
Fire and explosion	No fire or explosion hazard exists.
Extinguishing	Use an extinguishing agent suitable for the surrounding fire.
Hazchem code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.
Environmental precautions	Prevent product from entering drains and waterways.
Methods of cleaning up	Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.
References	See Sections 8 and 13 for exposure controls and disposal.

7. STORAGE AND HANDLING

Storage	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.
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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards

Ingredient	Reference	TWA		STEL	
ingrouoin		ppm	mg/m³	ppm	mg/m³
Silica, Crystalline Quartz	SWA (AUS)		0.1		

 Biological limits
 No biological limit allocated.

 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

Eye / FaceWear dust-proof goggles.HandsWear PVC or rubber gloves.BodyNot required under normal conditions of use.RespiratoryWhere an inhalation risk exists, wear a Class P2 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

GREY TO BLACK FINE SOLID OR POWDERY ASH



Product Name MILL FLY ASH

Odour Flammability Flash point Boiling point Boiling point Evaporation rate pH Vapour density Specific gravity Solubility (water) Vapour pressure Upper explosion limit Lower explosion limit Partition coefficient Autoignition temperature Decomposition temperature Viscosity Explosive properties Oxidising properties	SLIGHT SULPHUR ODOUR NON FLAMMABLE NOT RELEVANT NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE ALKALINE NOT AVAILABLE INSOLUBLE NOT AVAILABLE NOT RELEVANT NOT RELEVANT NOT RELEVANT NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE
Oxidising properties Odour threshold % Volatiles	NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE
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10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended conditions of storage.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to avoid	Incompatible with acids (eg. nitric acid) and alkalis (eg. sodium hydroxide).
Hazardous Decomposition Products	Crystalline silica may form after the product is exposed to extended periods of high temperatures (> 900°C).
Hazardous Reactions	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	High chronic toxicity - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Wetting prior to application reduces the potential for dust inhalation. Chronic exposure to crystalline silica may result in lung fibrosis (silicosis). Crystalline silica is classified as carcinogenic to humans (IARC Group 1).		
Еуе	Irritant. Contact may result in irritation, lacrimation, pain and redness.		
Inhalation	Irritant. Over exposure to dust may result in mucous membrane irritation of the respiratory tract. Chronic exposure to crystalline silica may result in silicosis (lung fibrosis). Crystalline silica is classified as carcinogenic to humans (IARC Group 1).		
Skin	Irritant. Contact may result in irritation, redness, pain and rash.		
Ingestion	May be harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea.		
Toxicity data	QUARTZ (SILICA CRYSTALLINE)(14808-60-7)LCLo (inhalation)300 ug/m³/10 years (human)TCLo (inhalation)16 000 000 particles/ft3/8 hours/17.9 years (human-fibrosis)		

12. ECOLOGICAL INFORMATION

Toxicity	No information provided.
Persistence and degradability	No information provided.
Bioaccumulative potential	No information provided.
Mobility in soil	No information provided.
Other adverse effects	No information provided.



13. DISPOSAL CONSIDERATIONS

- Waste disposal
- Legislation

Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer if additional information is required.

Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN number	None Allocated	None Allocated	None Allocated
Proper shipping name	None Allocated	None Allocated	None Allocated
DG class/ Division	None Allocated	None Allocated	None Allocated
Subsidiary risk(s)	None Allocated	None Allocated	None Allocated
Packing group	None Allocated	None Allocated	None Allocated
Hazchem code	None Allocated		

15. REGULATORY INFORMATION

Poison schedule
Inventory Listing(s)

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). **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)** All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information

The organic compounds in this product is described by the manufacturer as burnt bagasse (sugar cane residue). The trace elements in this product are described as nitrogen, sulphur, phosphorus, iron oxides, manganese oxides, potassium, calcium and magnesium oxides.

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.



Product Name MILL FLY ASH

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
	GHS	Globally Harmonized System
	IARC	International Agency for Research on Cancer
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	PEL	Permissible Exposure Limit
	рН	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
	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

Revision history

Prepared by

Revision	Description
2.1	Standard SDS Review
2.0	Standard SDS Review
1.0	Initial SDS creation

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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> Revision: 2.1 SDS Date: 27 November 2013

> > End of SDS

