MATERIAL SAFETY DATA SHEET (ADVISORY)

QMAG DEADBURN MAGNESIA

STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of Worksafe Australia. (See Exposure Standards)

COMPANY DETAILS

Company: QUEENSLAND MAGNESIA PTY LTD
Address: PO Box 5798, Central Qld Mail Centre, Qld 4702
Street Address: 246 Boundary Rd, Parkhurst Qld 4702
Telephone Number: +61 7 4920 0200
Fascimile Number: +61 7 4936 1380

1. IDENTIFICATION

HAZARD RATINGS

Health Hazard: 1
Flammability: 0
Reactivity: 0
Body Contact: 1
Scale:Min/nil=0 Low=1 Moderate=2 High=3 Extreme=4

Product Names: **QMAG SUPER, QMAG EXTRA, QMAG STANDARD, QMAG HFe, DBMS, S-DUST, DBM-L**

Other Names:
Product Code: Not applicable
UN Number: None
Dangerous Goods Class: None
Subsidiary Code: None
Hazchem Code: None
Poisons schedule Number: None
Use: Used to manufacture refractory bricks

PHYSICAL DESCRIPTION/PROPERTIES

Appearance: Solid briquettes with some dust from physical breakdown
Boiling Point: (deg. C) Not applicable
Melting Point: (deg. C) 2600 deg. C - 2800 deg. C
Vapour Pressure: (kPa) Not applicable
Specific Gravity: 3.4 – 3.5
Flashpoint: (deg. C) Not applicable
Lower Explosive Limit: (%) Not applicable
Upper Explosive Limit: (%) Not applicable
Solubility in Water: Insoluble 0.001%
OTHER PROPERTIES None

INGREDIENTS

Chemical Name		CAS Number	Proportion (%)
Magnesium Oxide	MgO	1309-48-4	>96%
Calcium Oxide	CaO	1305-78-8	<1%
Larnite	αCa_2SiO_4		<1%
	βCa_2SiO_4		<1%
Alite	Ca_3SiO_5		<1%
Manganese Dioxide	Mn_3O_4	1313-13-9	<0.5%
Iron Oxide	Fe_2O_3	1309-37-1	<0.5%
Aluminium Oxide	Al_2O_3	1344-28-1	<0.5%
Chromium Oxide	Cr_2O_3 (Chromite processed)	1308-31-2	<0.1%

2. HEALTH EFFECTS

HEALTH EFFECTS:

Acute:

Swallowed: Considered an unlikely route of entry in commercial/industrial environments. The material is regarded as practically non-toxic but may be harmful if swallowed in large quantity. Oral administration would generally result in purging.

Eyes: The dust is irritating and may be abrasive to the eyes.

Skin: The material may be mildly irritating and may cause drying of the skin.

Inhaled: Not normally a hazard due to non-volatile nature of product. The dust is irritating to the upper respiratory tract.

Chronic:

Principle routes of exposure are usually by inhalation of generated dust and skin contact. As with any chemical product, contact with unprotected bare skin; inhalation of vapours, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practices.

FIRST AID:

Swallowed: Rinse mouth out with plenty of water. If irritation or discomfort persists seek medical attention

Eyes: This product is abrasive, if it comes in contact with the eyes: Immediately hold the eyes open and wash continuously, for a least 15 minutes, with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to doctor or hospital without delay. Removal of any contact lens after an eye injury should only be undertaken by skilled personnel.

Skin: If product comes in contact with the skin: Wash affected area with water (and soap if available). Seek medical attention in event of irritation.

Inhaled: If dust is inhaled, remove to fresh air. Encourage patient to blow nose to ensure clear breathing passages. Rinse mouth with water. Consider drinking water to remove dust from throat. If irritation or discomfort persists seek medical attention.

ADVICE to DOCTOR: Nil. The general effect of a large ingestion of magnesia is a purging of the body.

3. PRECAUTIONS FOR USE

EXPOSURE STANDARDS:

QMAG Deadburn Magnesia	None assigned for mixture. Refer to individual constituents.
Magnesium Oxide	No exposure limits set by NOHSC or ACGIH for dust. Dust not otherwise classified, as inspirable dust ES TWA: 10 mg/m3. NOTE: Where heating or burning occurs, Worksafe Australia lists MgO fumes as a hazardous substance. MAK value: 6 mg/m3 as magnesium oxide fumes. ES TWA 10 mg/m3. TLV TWA: 10 mg/m3.
Calcium Oxide	TLV TWA: 2 mg/m3. ES TWA: 2 mg/m3. MAK Value 5 mg/m3 - measured as the inhalable fraction of the aerosol. MAK Category I Peak Limitation: For local irritants.
Chromite processed	TLV TWA 0.05 mg/m3 NOTE: High temperature and oxidising processing may convert chromite ore to more hazardous hexavalent chromium, classified by ACGIH as, chromite processing (chromate), as Cr.

ENGINEERING CONTROLS:

Use in well ventilated area.
General exhaust is adequate under normal operating conditions.
If risk of over exposure exists, wear SAA approved dust respirators.
Correct fit is essential to ensure adequate protection.

PERSONAL PROTECTION:

Eye:	Safety glasses with side shields; or as required, chemical goggles. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.
Hands / **Feet:**	Barrier creams and cotton gloves or PVC gloves. Safety footwear.
Other:	No special equipment required when handling small quantities. Otherwise; overalls and eyewash units. The local concentration of material, quantity and condition of use determines the type of personal protection equipment required. For further information, consult your Occupational Health and Safety Advisor.
Flammability:	Non-flammable.

4. SAFE HANDLING INFORMATION

STORAGE and TRANSPORT:

Suitable Container:	Multi ply paper bag with sealed plastic liner or heavy gauge plastic bag. Check that all containers are clearly labeled and free from leaks. Metal cans or metal drums. Delivery may be in bulk by special vehicle.
Storage Incompatibility:	Keep dry.
Storage Requirement:	Store in original containers. Keep containers securely sealed. Store in cool, dry, well ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers from physical damage and check regularly for leaks.
Transportation:	No restrictions.

SPILLS and DISPOSAL:

Minor Spills:	Clean up all spills immediately. Wear impervious gloves and safety glasses. Avoid generating and breathing dust. Vacuum up or sweep up and place in suitable container for disposal.
Major Spills:	Clear area of personnel and move up wind. Use dry clean up procedures. Avoid generating dust. If inhalation risk of exposure exists, wear SAA approved dust respirators. Collect recoverable product into labeled containers for recycling.
Disposal:	Recycle wherever possible. Consult State Land Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers where possible, or dispose of in an authorised landfill.
FIRE/EXPLOSION HAZARD:	Non combustible. Not considered to be a significant fire risk, however containers may burn.
OTHER INFORMATION:	Nil.
CONTACT POINT:	Senior Training and Safety Co-ordinator. Queensland Magnesia. Pty. Ltd. Chief Chemist. Queensland Magnesia. Pty. Ltd. AUSTRALIA: POISONS INFORMATION CENTRE:- 13 11 26 AUSTRALIA: EMERGENCY SERVICES. POLICE, FIRE or AMBULANCE:- 000