



SAFETY DATA SHEET

MAG PLUS AND MAG OXIDE

1. SUBSTANCE IDENTIFICATION

Country Mile Dusting Mag Plus/Mag Oxide

Supplier name: QMAG LIMITED
Supplier address: 246 Boundary Road, Parkhurst QLD 4702 Australia
Supplier phone: +61 (07) 4920 0200
Supplier fax: +61 (07) 4936 1380
Supplier product name: QMAG CAUSTIC CALCINED MAGNESIA PRODUCTS GROUP 2
Use: Animal feed, fertiliser, hydrometallurgy, sewage treatment and steel manufacture.

2. HAZARDS IDENTIFICATION

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

HSNO Classifications: 6.4A - Substance that is irritating to the eyes

Pictogram:



Signal Word: WARNING

Hazard Statements

H319 Causes serious eye irritation.

Precautionary Statement

P103 Read label before use.

Precautionary statement – Prevention

P264 Wash contaminated skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement – Disposal

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMMON NAME	CAS NUMBER	Proportion
Magnesia	1309- 48- 4	0- > 90%
Amorphous Silica		< 5%
Magnesium hydroxide	1309- 42- 8	<3%
Calcium Oxide	1305- 78- 8	<1%
Crystalline Silica (Quartz)	14808- 60- 7	<1%

4. FIRST - AID MEASURES

Inhalation:	If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.
Ingestion:	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.
Skin:	Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.
Eye contact:	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.
First Aid Facilities:	Eyewash, safety shower and normal washroom facilities.
Advice to Doctor:	Treat symptomatically.
Other Information:	For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (0800 764 766)

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Use appropriate fire extinguisher for surrounding environment.
Hazards from Combustion Products:	Under fire conditions this product may emit toxic and/or irritating fumes and gases.
Specific Hazards Arising:	The product is not combustible, however the packaging will burn under fire conditions.
Decomposition Temperature:	Not available
Precautions in connection with Fire:	Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.
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7. HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.
Conditions for safe storage:	Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Crystalline Silica (Quartz):	TWA: 0.2 mg/m ³ (respirable)
Magnesia:	TWA: 10 mg/m ³
Calcium Oxide:	TWA: 2 mg/m ³

Amorphous Silica: TWA: 10 mg/m³ (amorphous silica)

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Biological Limit Values: No biological limits allocated.
 Appropriate Engineering Controls: This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.
 Respiratory Protection: If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
 Eye Protection: Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
 Hand Protection: Wear gloves of impervious material such as rubber or PVC. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
 Body Protection: Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance / State / Odor:	White to pink solid	Odour Threshold	No data available
Odor:	Slight	Vapour Pressure (kPa)	No data available
Melting point	2600°C - 2800°C	Flash Point (°C)	No data available
Freezing point	No data available	Lower Explosive Limit (%)	No data available
Flammability	Non-combustible solid	Upper Explosive Limit (%)	No data available
Boiling Point	3600°C	Density	No data available
Autoignition temperature	No data available	Kinematic Viscosity	No data available
pH	No data available	Evaporation Rate	No data available
Specific Gravity (water = 1)	>1.0	Dynamic Viscosity	No data available
Solubility in Water	Insoluble		
Partition Coefficient: n-octanol/water	No data available		

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of storage and handling.
 Reactivity and Stability: Reacts with incompatibles materials.
 Conditions to Avoid: Extremes of temperature and direct sunlight.
 Incompatible materials: Incompatible with interhalogens (eg. bromine pentafluoride, chlorine trifluoride) and phosphorus pentachloride. This product will hydrate slowly when exposed to water.
 Hazardous Decomposition Products: Thermal decomposition may result in the release of toxic and/or irritating fumes.
 Possibility of hazardous reactions: Reacts violently or explosively with interhalogens (eg. bromine pentafluoride, chlorine trifluoride) and phosphorus pentachloride.
 Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information: No toxicity data available for this material.

Ingestion: Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Inhalation: Inhalation of dusts may irritate the respiratory system.
Skin: May be irritating to skin. The symptoms may include redness, itching and swelling.
Eye: Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory sensitisation: Not expected to be a respiratory sensitiser.
Skin Sensitisation: Not expected to be a skin sensitiser.

Germ cell mutagenicity: Not considered to be a mutagenic hazard.
Carcinogenicity: Not considered to be a carcinogenic hazard.
Reproductive Toxicity: Not considered to be toxic to reproduction.
STOT-single exposure: Not expected to cause toxicity to a specific target organ.
STOT-repeated exposure: Not expected to cause toxicity to a specific target organ.
Aspiration Hazard: Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No ecological data are available for this material.
Persistence and degradability: Not available
Mobility: Not available
Bioaccumulative Potential: Not available
Other Adverse Effects: Not available
Environmental Protection: Prevent this material entering waterways, drains or sewers.

13. DISPOSAL CONSIDERATIONS

Product Disposal: Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose directly into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal: The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport: Not classified as Dangerous Goods for transport according to the NZS 5433:2012 Transport of Dangerous Goods on Land.
Marine Transport (IMO/IMDG): Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Air Transport (ICAO/IATA): Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
U.N. Number: None Allocated
UN proper shipping name: None Allocated

Transport hazard class(es): None Allocated
IMDG Marine pollutant: No
Transport in Bul: Not available
Special Precautions for User: Not available

15. REGULATORY INFORMATION

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006

HSNO Approval Number: HSR002503

16. OTHER INFORMATION

Date of preparation or last revision of SDS: SDS amendment: Dec 2019
1. Identification: Supersedes: March 2018

SDS amendment: March 2018
1. Identification: SDS Reviewed: July 2015, Supersedes: May 2015

References

- Workplace Exposure Standards and Biological Exposure Indices- Transport of Dangerous goods on land NZS 5433.
- Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06). - Assigning a hazardous substance to a group standard.
- American Conference of Industrial Hygienists (ACGIH)
- Globally Harmonised System of classification and labelling of chemicals.
- **Emergency Advice: Chemical Safety International ERS - 1800 638 556 (24 Hours)**

PLEASE NOTE: The information contained herein is based on data available to QMAG Limited from both our own technical sources and from recognised published references and is believed to be both accurate and reliable. QMAG Limited has made no effort to censor nor to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and confirm whether they are appropriate. It is therefore recommended that you undertake your own risk assessment in relation to your method of handling and proposed use of this product. QMAG Limited accepts no liability whatsoever for damage or injury caused from the use of this information or of suggestions contained herein.

End of Safety Data Sheet