

Magnesium Oxide

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Magnesium Oxide
Product Code:	0003100, 0003110, 0003112 & 0003120 (Magnesium Oxide bulk - fertiliser), 0003410 (Magnesium Oxide Fine - ANH), 0003600 Magnesium Oxide for Flexi-N
Recommended Use:	Fertiliser additive
Restrictions of Use:	Refer to Section 15
Company Identification:	Ravensdown Limited
Address:	292 Main South Road, Hornby, Christchurch, 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police
Date of SDS Preparation	17 March 2025 v2

Section 2: HAZARD IDENTIFICATION

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT %
Magnesium Oxide	1309-48-4	90-100%

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.
If on skin:	Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
If ingested:	Rinse mouth. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If inhaled:	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.
Most important symptoms and effects, both acute and delayed	
Symptoms:	Refer to Section 11
Eyes:	Not applicable.
Skin:	Not applicable.
Ingested:	Not applicable.

Inhaled:	Not applicable.
Chronic:	Not applicable.
Advice to Doctor:	No specific antidote. Treat symptomatically. If vomiting is induced, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Not flammable or combustible.
Hazards from combustion products	None allocated.
Suitable Extinguishing media	Use media suitable for surrounding materials.
Precautions for firefighters and special protective clothing	Wear full protective gear.
HAZCHEM CODE	None allocated

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear appropriate protective clothing. Exclude non-essential people from the area. Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible.
Environmental precautions:
Prevent from entering drains, waterways or sewers. If spill does enter waterways contact the local authority.
Methods and material for containment and cleaning up:
Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Dispose as per Section 13.

Section 7: HANDLING AND STORAGE

Handling:	Keep out of reach of children. Avoid contact with skin, eyes and inhalation of vapours. Use personal protective equipment as required.
Storage:	Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertiliser and seed. Store in accordance with NZS 8409; Management of Agrichemicals.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA	STEL
	ppm mg/m ³	ppm mg/m ³

No exposure limits have been assigned for this product.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15TH EDITION.

Engineering Controls:	Handle in well-ventilated area. Avoid inhalation of dust.
Personal Protection Equipment:	
Eyes:	Not required.
Skin/Hands:	When contact with product is likely, wear protective gloves.

Respiratory:	Not required.
General:	Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing daily after work. Contaminated clothing should not be allowed out of the workplace.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Powder or small granule
Colour	White, off-white or brown
Odour	Odourless
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	2600°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.2
Bulk Density	Not available
Water Solubility	Insoluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Granulometrics (mm)	Not available

Section 10: STABILITY AND REACTIVITY

Stability of Substance	Stable. When stored appropriately this product should show no significant degradation for at least 5 years from the date of manufacture.
Possibility of hazardous reactions	Not data available.
Conditions to Avoid	High humidity.
Incompatible Materials	No data available.
Hazardous Decomposition Products	Hydrogen chloride.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable however Inhalation of dust may be irritating.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.

STOT/RE	Not applicable.
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Section 12: ECOLOGICAL INFORMATION

The mixture is not hazardous to the environment.

Persistence and degradability	No data available.
Bioaccumulation	No data available
Mobility in Soil	No data available.
Other adverse effects	No data available

Section 13: DISPOSAL INFORMATION

Disposal Method:	Dispose of product only by using according to label or at an approved landfill. Recycle where possible. Do not contaminate bodies of water with chemical or empty container. Burn container in an appropriate incinerator if circumstance, such as wind direction permit. Otherwise bury in an approved landfill. Do not use container for any other purpose.
Precautions or methods to avoid:	None known.

Section 14: TRANSPORT INFORMATION

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Section 15: REGULATORY INFORMATION

This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Section 16: OTHER INFORMATION

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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