


Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Magnesium Nitrate
Other Names:	Magnesium (II) Nitrate, Nitric Acid-Magnesium Salt
Product Code:	0007510
Recommended Use:	Fertiliser
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	4 August 2020

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No:	HSR001330
Pictograms:	
Signal Word:	Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
5.1.1C	H272	May intensify fire oxidiser.	Ox. Liq. 3/Ox. Sol. 3
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A

Prevention Code	Prevention Statement
P103	Read label before use.
P210	Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P220	Keep/Store away from clothing and combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use surrounding materials for extinction.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT
Magnesium Nitrate	10377-60-3	100%

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Flush with plenty of water for several minutes, holding eyelids open if necessary. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
If on skin:	Remove contaminated clothing then wash affected area thoroughly with soap and water. Seek medical attention if needed.
If ingested:	Never give anything by mouth to an unconscious person. Rinse mouth but DO NOT induce vomiting. Seek medical advice.
If inhaled:	Remove patient to fresh air. Keep at rest in comfortable position for breathing. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance if needed.
Most important symptoms and effects, both acute and delayed	
Symptoms:	
Eyes:	Causes severe eye irritation. Direct contact may result in lachrymation (tears), pain, redness and conjunctivitis.
Skin:	Causes mild skin irritation. Prolonged and repeated skin exposure may result in irritation, skin rash and dermatitis.
Ingested:	Not triggered however ingestion of large quantities may lead to dizziness, nausea, vomiting, diarrhea and abdominal cramps, convulsions and collapse. Acute poisoning is rare but may cause gastric disorders and anemia.
Inhaled:	Not applicable. Over exposure may result in mucous membrane irritation and coughing.
Chronic:	Not applicable.
Notes to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Non-flammable. Substance is a strong oxidiser. When mixed with oxidisable substances.
Hazards from combustion products	Nitrogen oxides, magnesium oxide
Suitable Extinguishing media	Based on surrounding materials. Use water to keep surrounding containers cool.
Precautions for firefighters and special protective clothing	Full protective clothing and equipment including SCBA.
HAZCHEM CODE	1Z

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Product Name: Magnesium Nitrate
Date of SDS: 4 August 2020

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area.

Environmental precautions:

Avoid unintended release of excessive amounts into waterways or sewers. If spill does enter waterway contact local authority.

Methods and material for containment and cleaning up:

Contain spill and sweep up with a broom and spade or vacuum. Ensure adequate ventilation. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Dispose according to Section 13.

Section 7: HANDLING AND STORAGE

Handling:	<p>Read label before use.</p> <p>Keep away from heat, sparks, open flames or hot surfaces. No smoking.</p> <p>Keep/Store away from clothing and combustible materials.</p> <p>Take any precaution to avoid mixing with combustibles.</p> <p>Avoid generating dusts– do not breathe in dust.</p> <p>Use in outdoors or in well-ventilated area.</p> <p>Wash hands thoroughly after handling.</p> <p>Wear protective clothing as detailed in Section 8.</p>
Storage:	<p>Keep out of reach of children.</p> <p>Store in a cool, dry area away from combustible or any readily oxidisable materials.</p> <p>Separate from other class materials by at least three metres.</p>

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m³	ppm	mg/m³
Inspirable dust:	-	10	-	-
Respirable dust:	-	3	-	-

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 NOV 2019 11TH EDITION.

Engineering Controls:	Handle in well-ventilation area. If dust generated use local extraction to control. Avoid inhalation of dust.
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Personal Protection Equipment:



Eyes:	Wear safety goggles with side shield. Eye wash facilities should be available.
Skin/Hands:	Wear protective gloves and overalls.
Respiratory:	If dust is present wear a dust mask and goggles.
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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Crystals/Prills/Flakes
Colour	White
Odour	Odourless

Odour Threshold	Not available
pH	5.5 to 6.5 (1% solution)
Boiling Point	330°C
Melting Point	89°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Non Flammable - Oxidiser
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.46g/cm ³
Water Solubility	125g/100ml
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10: STABILITY AND REACTIVITY

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Heat, ignition sources, contact with materials below.
Incompatible Materials	Combustible materials. oxidisable materials.
Hazardous Decomposition Products	Nitrogen oxides when heated to decomposition.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not triggered however ingestion of large quantities may lead to dizziness, nausea, vomiting, diarrhea and abdominal cramps, convulsions and collapse. Acute poisoning is rare but may cause gastric disorders and anemia.
Dermal	Not applicable.
Inhalation	Not applicable. Over exposure may result in mucous membrane irritation and coughing.
Eye	Causes severe eye irritation. Direct contact may result in lachrymation (tears), pain, redness and conjunctivitis.
Skin	Causes mild skin irritation. Prolonged and repeated skin exposure may result in irritation, skin rash and dermatitis.

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.

Section 12: ECOLOGICAL INFORMATION

This product is not harmful to the environment.

Product:	
Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.

Other adverse effects	No data available.
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Section 13: DISPOSAL INFORMATION

Disposal Method:	Collection into sealable containers and dispose of in an appropriate land fill. Reuse or recycle where possible. If practicable apply excess fertiliser at recommended rates to appropriate land. Observe any local authority restrictions that may apply.
Container Disposal:	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as waste.
Precautions or methods to avoid:	None known.

Section 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	1474
Class - Primary	5.1
Packing Group	III
Proper Shipping Name	MAGNESIUM NITRATE
Marine Pollutant	No
Special Provisions	If the product's individual container is below 5kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017	
EPA Approval Code:	HSR001330
HSNO Classification:	5.1.1C, 6.3B, 6.4A

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	1000kg (closed container) / 100kg (open container) (5.1.1C)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg (5.1.1C)
Emergency Response Plan	5000kg (5.1.1C)
Secondary Containment	5000kg (5.1.1C)
Fire Extinguishers	500kg = 2 x
Restriction of Use	<p>Reg 77A:</p> <p>Description: A use restriction is applied to this substance.</p> <p>Variation: No person may use this substance described as a pesticide or a veterinary medicine. However, this substance may be used in the formulation of a pesticide or a veterinary medicine.</p> <p>For the purpose of this control—</p> <p>(a) pesticide includes, but is not limited to, a product intended for use as an acaricide, antifouling paint, avicide, fumigant, fungicide, insecticide, herbicide, miticide, molluscicide, piscicide, timber treatment preservative or vertebrate toxic agent</p> <p>(b) veterinary medicine has the same meaning given to it in the Agricultural Compounds and Veterinary Medicines Act 1997.</p>

Glossary

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 Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd 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. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact Ravensdown, if further information is required.

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4 August 2020

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