

## Magnesium Sulphate

## Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

<b>Product Name:</b>	<b>Magnesium Sulphate</b>
<b>Other Names:</b>	Magnesium Sulphate Heptahydrate; Sulphuric Acid, Magnesium (II) Salt Heptahydrate; Epsom Salts; Epsotop; Bittersalz
<b>Product Code:</b>	0004010 (Technical/fertiliser grade) 8150010 (Animal Health grade)
<b>Recommended Use:</b>	Fertiliser additive
<b>Restrictions of Use:</b>	Refer to Section 15
<b>Company Identification:</b>	Ravensdown Limited
<b>Address:</b>	292 Main South Road, Hornby, Christchurch, 8042 PO Box 1049, Christchurch 8011
<b>Customer Centre:</b>	0800 100 123
<b>National Poisons Information Centre:</b>	0800 POISON (0800 764 766)
<b>Emergency Phone Number:</b>	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
<b>Transport Emergency Phone Number:</b>	111 - tell operator what service is needed: Fire, Ambulance or Police
<b>Date of SDS Preparation</b>	22 December 2021

## 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 Sulphate Heptahydrate	10034-99-8	95-100%

## Section 4: FIRST AID MEASURES

<b>Routes of Exposure:</b>	
<b>If in eyes:</b>	Flush with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance if needed.
<b>If on skin:</b>	Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected seek medical assistance.
<b>If ingested:</b>	Never give anything by mouth to an unconscious person. If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764 766). Seek medical assistance if needed.
<b>If inhaled:</b>	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance if needed.
<b>Most important symptoms and effects, both acute and delayed</b>	
<b>Symptoms:</b>	
<b>Eyes:</b>	Not applicable.
<b>Skin:</b>	Not applicable.
<b>Ingested:</b>	Not applicable.

<b>Inhaled:</b>	Inhalation of dust may be irritating.
<b>Notes to Doctor:</b>	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

<b>Hazard Type</b>	Non Flammable
<b>Hazards from combustion products</b>	Sulphur oxides, magnesium oxide
<b>Suitable Extinguishing media</b>	Based on surrounding materials.
<b>Precautions for firefighters and special protective clothing</b>	Breathing apparatus, goggles and protective gloves.
<b>HAZCHEM CODE</b>	None allocated

### Section 6: ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>
Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area.
<b>Environmental precautions:</b>
Avoid from entering drains, waterways or sewers.
<b>Methods and material for containment and cleaning up:</b>
Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of according to Section 13.

### Section 7: HANDLING AND STORAGE

<b>Handling:</b>	Always read the label before use. Keep out of reach of children. Avoid contact with skin, eyes and inhalation of vapours. Use personal protective equipment as required.
<b>Storage:</b>	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. See label for further information on handling and storage.

### Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

#### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

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 NOV 2019 11<sup>TH</sup> EDITION.

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

<b>General:</b>	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.
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## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Powder
<b>Colour</b>	Colourless crystal or white
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	5 – 8 (50g/l in water @ 20°C)
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Loses all waters of hydration at 250°C and decomposes at 1,124°C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	1.05
<b>Water Solubility</b>	Very soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

## Section 10: STABILITY AND REACTIVITY

<b>Stability of Substance</b>	Stable but releases waters of crystallisation when heated. When stored appropriately this product should show no significant degradation for at least 5 years from the date of manufacture.
<b>Possibility of hazardous reactions</b>	No data available.
<b>Conditions to Avoid</b>	High humidity.
<b>Incompatible Materials</b>	Ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium, and Calcium.
<b>Hazardous Decomposition Products</b>	Sulphur oxides.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute Effects:

<b>Swallowed</b>	Not triggered Ingestion of large quantities may lead to nausea, vomiting, diarrhoea, flushing of the skin, thirst hypertension, respiratory depression. May have a laxative effect.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not triggered however Inhalation of dust may be irritating.
<b>Eye</b>	Not applicable.
<b>Skin</b>	Not applicable.

### Chronic Effects:

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

STOT/RE	Not applicable.
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## Section 12: ECOLOGICAL INFORMATION

Not considered an ecotoxic substance.

<b>Product:</b>	
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulation</b>	No data available.
<b>Mobility in Soil</b>	No data available.
<b>Other adverse effects</b>	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.
Container Disposal:	Triple rinse container. Triple rinsed 20 litre containers containing the Agrecovery logo on the label, and that are free of all residues and have an intact legible label, may be taken to an Agrecovery collection site for disposal. Burn in an appropriate incinerator if circumstance, such as wind direction permit. Otherwise crush and bury in an approved landfill or recycle through an alternative approved recycling scheme. Do not burn container or 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 5433:2012

## Section 15: REGULATORY INFORMATION

**This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017**

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	Not required
Emergency Response Plan (Schedule 5)	Not required
Secondary Containment (Schedule 5)	Not required
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Restrictions of use	None known.

## Section 16: OTHER INFORMATION

### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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

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Please contact Ravensdown, if further information is required.

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