

## Kieserite

### Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Kieserite (Magnesium Sulphate Monohydrate)
Product Code:	0000400
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	18 June 2024

### 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 Monohydrate	14567-64-7	85%
Non-hazardous ingredients		To bal

### Section 4: FIRST AID MEASURES

<b>Routes of Exposure:</b>	
<b>If in eyes:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>If on skin:</b>	Wash affected area thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.
<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).
<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 immediately.
<b>Most important symptoms and effects, both acute and delayed:</b>	
<b>Symptoms:</b>	None known.
<b>Notes to Doctor:</b>	No specific antidote. Treat symptomatically.

### 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: ACCIDENTIAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

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 waterways contact local authority.

**Methods and material for containment and cleaning up:**

Contain spill and sweep up. Collect and place in sealable containers. Reuse or recycle where possible. Dispose of according to Section 13.

## Section 7: HANDLING AND STORAGE

<b>Handling:</b>	Wear protective clothing as detailed in SDS Section 8. Always read label before use. Handle in well ventilated areas. 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.
<b>Storage:</b>	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs.

## Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

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

Substance	TWA ppm mg/m <sup>3</sup>	STEL ppm mg/m <sup>3</sup>
No ingredients have exposure limits		

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 2023 14<sup>TH</sup> EDITION.

<b>Engineering Controls:</b>	Handle in well ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Avoid inhalation of dust.
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**Personal Protection Equipment:**



<b>Eyes:</b>	Wear safety goggles.
<b>Skin/Hands:</b>	Wear protective gloves, and overalls.
<b>Respiratory:</b>	If dust is present wear dust mask.
<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.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Uneven Granular
<b>Colour</b>	Creamy brown/white
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not flammable
<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>	Not available

<b>Bulk Density</b>	Not available
<b>Water Solubility</b>	Soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Decomposes above 850°C
<b>Kinematic Viscosity</b>	Not available
<b>Granulometrics (mm)</b>	Not available

### Section 10: STABILITY AND REACTIVITY

<b>Stability of Substance</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Not available.
<b>Conditions to Avoid</b>	Strong heat, moisture.
<b>Incompatible Materials</b>	Oxidising agents.
<b>Hazardous Decomposition Products</b>	Sulphur oxides, Magnesium Oxide

### Section 11: TOXICOLOGICAL INFORMATION

#### Acute Effects:

<b>Swallowed</b>	Not triggered. May lead to nausea, vomiting, diarrhea <b>Acute Toxicity (Oral):</b> LD50 5,000mg/kg (mouse).
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<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.
<b>STOT/RE</b>	Not applicable.

### Section 12: ECOLOGICAL INFORMATION

Not hazardous to the environment.

#### Product:

<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	Unlikely to bio-accumulate
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

### Section 13: DISPOSAL INFORMATION

<b>Disposal Method:</b>	Dispose of product only by using according to label or at an approved landfill.
<b>Container Disposal:</b>	Dispose of in an approved landfill. Do not use container for any other purpose.
<b>Precautions or methods to avoid:</b>	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

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 2023 14th 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

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Please contact Ravensdown, if further information is required.

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