

Version 1.1

Issue date 28/09/2024

**SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY**

## Product Identifier

Product Name	Magnesium Sulphate
Other Names	Epsom Salt, Magnesium Sulfate; Magnesium sulphate - MAGRICULTURE; Sulfuric acid magnesium salt
Proper Shipping Name	Magnesium sulfate
Other means of Identification	None

## Relevant identified uses of the substance or mixture

Relevant identified uses	Nutritional supplement for livestock
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## Details of the supplier of the safety data sheet

Registered company name	Vetpak Limited
Address	249 Bruce Berquist Dr, Te Awamutu 3800.
Telephone	(07) 870 2024
Website	www.vetpak.co.nz
Email	sales@vetpak.co.nz

## Emergency telephone numbers

Association/ Organisation	New Zealand National Poison information centre
Emergency telephone number	0800 764 766 (07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays.
Other emergency telephone numbers	New Zealand emergency services 111

**SECTION 2 – HAZARDS IDENTIFICATION**

## Hazard Classification:

This product is not hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

**SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

## Mixtures

CAS Number	% (weight)	Name
10034 – 99 – 8	100	Magnesium Sulphate Heptahydrate

## SECTION 4 – FIRST AID MEASURES

### Description of first aid measures

Eye contact	<ul style="list-style-type: none"> <li>➤ Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids.</li> <li>➤ Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation occurs, get medical advice/attention.</li> </ul>
Skin contact	<ul style="list-style-type: none"> <li>➤ Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.</li> </ul>
Inhalation	<ul style="list-style-type: none"> <li>➤ Remove victim to fresh air and keep at rest in a position comfortable for breathing.</li> <li>➤ If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing.</li> <li>➤ Administer oxygen if breathing is difficult.</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>➤ Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Get medical advice/attention if large quantities of this material are swallowed or if you feel unwell.</li> <li>➤ Never give anything by mouth to an unconscious person.</li> </ul>
Advice to the doctor	Treat symptomatically and supportively. Most important symptoms and effects, both acute and delayed: None known.

## SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media	<ul style="list-style-type: none"> <li>➤ Dry chemical,</li> <li>➤ Carbon dioxide (CO<sub>2</sub>),</li> <li>➤ Foam or water spray for extinction.</li> </ul>
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Flammability Conditions	➤ Non-combustible. Material does not burn
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### Advice for fire fighters

Fire fighting	<ul style="list-style-type: none"> <li>➤ If safe to do so, move undamaged containers from fire area.</li> <li>➤ Cool containers with water spray until well after fire is out</li> </ul>
Fire/explosion hazard	➤ Fire or heat will produce irritating and/or toxic fumes, including oxides of Sulfur, Magnesium oxide
Special fire fighting hazards	➤ Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Protection Equipment	➤ Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

General Response Procedure	<ul style="list-style-type: none"> <li>➤ Ensure adequate ventilation.</li> <li>➤ Do not touch or walk through spilled material - Spillages may be slippery! Promptly clean up spills.</li> <li>➤ Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.</li> </ul>
Large spills	<ul style="list-style-type: none"> <li>➤ Alert fire brigade and tell them location and nature of hazard</li> <li>➤ Prevent spillage from entering the waterways or drains</li> <li>➤ Consider evacuation (or protect in place)</li> <li>➤ Increase ventilation</li> </ul>



Clean Up Procedures	➤ With clean shovel, place material into clean, dry container and cover loosely. Move containers from spill area.
Containment	➤ Prevent further leakage or spillage if safe to do so. Prevent dust cloud.
Decontamination	➤ Flush residue with water.
Environment Precaution Measures	<ul style="list-style-type: none"> <li>➤ Prevent entry into drains and waterways.</li> <li>➤ Dispose of any absorbent material properly according to local authority regulations</li> </ul>

## SECTION 7 – HANDLING AND STORAGE

### Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> <li>➤ Safety showers and eyewash facilities should be provided within the immediate work area for emergency use.</li> <li>➤ Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.</li> <li>➤ Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest.</li> <li>➤ Use personal protective equipment as required</li> </ul>
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### Conditions for safe storage, including any incompatibilities

Suitable container	➤ Keep in the original container
Storage incompatibility	<ul style="list-style-type: none"> <li>➤ Store in a well-ventilated place, out of direct sunlight, protected from extremes of temperature and humidity.</li> <li>➤ Keep containers tightly closed when not in use - check regularly for spills.</li> <li>➤ Keep away from incompatible materials</li> </ul>

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>Magnesium Sulphate Heptahydrate</p> <p>New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m3 (total); TWA = 3 mg/m3 (respirable)</p>
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### Exposure controls

Appropriate engineering controls	<p>A system of local and/or general exhaust is recommended to keep employee exposures as low as possible.</p> <p>Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Always wash hands before smoking, eating, drinking or using the toilet.</p> <p>Wash contaminated clothing and other protective equipment before storage or re-use.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> <li>➤ Safety glasses with side shields</li> <li>➤ Chemical goggles</li> <li>➤ Contact lenses may pose a special hazard soft contact lenses may absorb and concentrate materials.</li> <li>➤ Medical personal should be trained and readily available in the event of chemical exposure; they should begin eye irrigation and remove contact lenses as soon as practicable. Lenses should be removed at the first sign of eye irritation</li> </ul>



Skin protection	Wear general protective gloves e.g. light weight rubber gloves
Hand / feet protection	As above for hands; wear appropriate footwear for the environment
Other protection	<ul style="list-style-type: none"> <li>➤ Overalls</li> <li>➤ PVC Aprons</li> <li>➤ PVC protective gear</li> <li>➤ Eyewash facilities</li> <li>➤ Ensure there is ready access to a safety shower</li> </ul>

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Crystals (Fine or granular)	Relative density (Water = 1)	1.76 g/cm <sup>3</sup>
Odour	Odourless	Solubility	(71 g/100 ml at 20 °C)
Odour threshold	Not available	Decomposition temperature	Not available
pH	6 – 7 (in 5% Water)	Viscosity	Not available
Melting point (°C)	1000°C	Molecular weight (g/mol)	Not available
Boiling point (°C)	Not available	Taste	Not available
Flash point (°C)	Not available	Explosive properties	Not explosive
Evaporation rate	Not available	Oxidising properties	Not available
Flammability	Not flammable	Volatile component (% vol)	None

## SECTION 10 – STABILITY AND REACTIVITY

General Information	At very high temperatures, magnesium oxide, sulfur dioxide and sulfur trioxide may be generated
Chemical stability	Stable under normal conditions of use.
Conditions to avoid	Avoid generating dust. Avoid extremes of temperature and direct sunlight
Incompatible materials	Incompatible/reactive with Metal hydrides and other water reactive materials.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

General Information	Breathing in dust may result in respiratory irritation
Ingestion	Ingestion may cause abdominal cramps and diarrhoea. Produces a laxative effect. Swallowing large amounts may lead to heart changes, flaccid paralysis and cyanosis Acute toxicity (Oral): - LD <sub>50</sub> , Man: 428 mg/kg LD <sub>50</sub> , Woman: 351 mg/kg
Inhalation	Not applicable
Eyes	Dust may cause mild eye irritation. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
Skin	Contact with skin may result in irritation
Carcinogen	Not applicable
Mutagen	Not applicable
Reproductive Toxicity	Not applicable



## SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence/Degradability	No information available.
Bioaccumulation Potential	Material does not bioaccumulate.
Environmental Impact	No information available

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none"><li>➤ Do not allow wash water from cleaning or process equipment to enter drains</li><li>➤ It may be necessary to collect all wash water for treatment before disposal</li><li>➤ In all case disposal to sewer may be subject to local laws and regulations and these should be considered first</li><li>➤ If in doubt contact the responsible authority</li><li>➤ Contact manufacturer for recycling options or consult local or regional waste management authority for disposal</li><li>➤ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed</li></ul>
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## SECTION 14 – TRANSPORT INFORMATION

### Labels required

Marine Pollutant	NO
HAZCHEM	NON-DANGEROUS GOODS: Not regulated for LAND transport.

### Land transport (ADG)

UN Number	No data available
Packing group	No data available
UN proper shipping name	Magnesium sulfate, heptahydrate
Environmental hazard	Not Hazardous
Transport hazard classes	No data available
Special precautions for user	No data available

### Air transport (ICAO-IATA / DGR)

UN Number	No data available
Packing group	No data available
UN proper shipping name	Magnesium sulfate, heptahydrate
Environmental hazard	Not Hazardous
Transport hazard classes	No data available
Special precautions for user	No data available

### Sea transport (IMDG / GGVSee)

UN Number	No data available
Packing group	No data available
UN proper shipping name	Magnesium sulfate, heptahydrate
Environmental hazard	Not Hazardous
Transport hazard classes	No data available
Special precautions for user	No data available



Marine Pollutant	No data available
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Transport in bulk according to Annex II of Marpol and the IBC Code - Not applicable

## SECTION 15 – REGULATORY INFORMATION

Safety, health and environment regulations / legislation specific for the substance or mixture

GHS Codes	None
National Inventory	Status - Aproved
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes - All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Hazardous Substances and New Organisms Amendment Act 2015
Approval Code	Non Hazardous

## SECTION 16 – OTHER INFORMATION

While Vetpak Limited in good faith has 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, Vetpak Limited accepts 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.

New Zealand National Poison Information Centre: 0800 764 766  
 New Zealand Emergency Services: 111  
 Vetpak Limited: +64 7 870 2024

Definitions and abbreviations

PC – TWA	Permissible concentration – time weighted average
PC – STEL	Permissible concentration – short term exposure limit
IARC	International agency for research on cancer
ACGIH	American conference of Government Industrial Hygiene
STEL	Short term exposure limit
TEEL	Temporary emergency exposure limit
IDLH	Immediate dangerous to life or health concentration
OSF	Odour safety factor
NOAEL	No observed adverse effect level
LOAEL	Lowest observed adverse effect level
TLV	Threshold limit value
LOD	Limit of detection
OTV	Odour threshold value
BCF	BioConcentration factors

END OF SDS

