

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING
PRODUCT IDENTIFIER

Product Name	Magnesium Sulphate
Other Names	Magnesium Sulphate Heptahydrate, Epsom salts; Sulfuric acid, magnesium salt (1:1), heptahydrate; Magnesium sulphate, 7- hydrate; Epsomite.
Recommended Use	Fertilizers and dietary supplements to correct magnesium deficiencies, textiles and dyestuffs, pharmaceuticals and cosmetics, brewing and distilling.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Registered distributor company name	Pure Ingredients Ltd	Pure Nature
Address	626A Rosebank Road, Avondale 1026	626A Rosebank Road, Avondale 1026
Telephone	+64 9 813 5619	+64 9 813 9412
Website	www.pureingredients.co.nz	www.purenature.co.nz
Email	compliance@pureingredients.co.nz	info@purenature.co.nz

EMERGENCY TELEPHONE NUMBER

Association / Organisation	0800 CHEMCALL / 0800 243 622 (24hr)
Emergency telephone numbers	111
Other emergency telephone numbers	0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

GHS / HSNO Hazard Classification	Non-Hazardous
HSNO Approval Number	N/A
Hazard Nature	Classified as Non-Hazardous according to the criteria of the New Zealand Hazardous Substances and New Organisms legislation and GHS 7th Edition.
Pictogram(s)	None
Signal Word	None
Precautionary Statements	May be hazardous if swallowed. Do not breathe dust. If in contact with eyes, rinse thoroughly.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Ingredient	CAS No.	% [weight/volume]
Magnesium Sulphate Heptahydrate	10034-99-8	>90

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Note to physician	Treat symptomatically.
Skin contact	If skin or hair contact occurs flush skin and hair with running water (and soap if available). Seek medical attention in the event of irritation.
Eye contact	If this product comes in contact with eyes wash out immediately with water. If irritation continues, seek medical attention.
Ingestion	Rinse mouth. Give a glass of water. First aid is not generally required. If unwell or in doubt, contact the Poison Centre (0800 764 766) or a doctor.
Inhalation	Remove to fresh air. Encourage patient to blow nose to ensure clear passage of breathing. Other measures are usually unnecessary. If symptoms persist, call a doctor.

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing media	In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions: water spray, dry powder, foam, carbon dioxide (CO2).
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Use standard procedure for chemical fires. Clear fire area of all non-emergency personnel. Stay upwind. Eliminate ignition sources. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	Non-combustible solid. Avoid generating dust, particularly clouds of dust in a confined or unventilated space. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
Hazards From Combustion Products	Decomposes on heating emitting toxic fumes such as sulphoxides.

SECTION 5 FIREFIGHTING MEASURES

Personal Protective Equipment	Firefighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves).
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SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment advice is contained in Section 8 of the SDS.

Personal protective equipment advice	Section 8 of the SDS.
Spill response	Avoid generating dust. Increase ventilation. Move upwind. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Personnel involved in the clean-up should wear full protective clothing. Stop leak if safe to do so. Use spark-proof tools and equipment. Sweep up or vacuum up (consider explosion-proof machines designed to be grounded during use). Collect in a labelled chemical waste container and seal for disposal. See section 13 of the SDS. Do NOT let product reach drains or waterways. If a significant amount does enter a waterway advise your local waste authority. Wash spill area with plenty of water after removal of contaminant.

SECTION 7 HANDLING AND STORAGE

Procedure for handling	Ensure an eye bath and safety shower are available and ready for use. Wear appropriate eye and skin protection. Do not eat, drink or smoke when handling chemicals. Wash thoroughly after handling. Keep packaging closed until ready for use. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid dust formation.
Suitable packaging	Store in original packaging. Check all containers are clearly labeled and free from leaks.
Storage incompatibility	Avoid contamination, store away from Dangerous Goods and Toxic Substances.
Storage requirements	Store in dry, cool well ventilated conditions out of direct sunlight. Observe manufacturer's storing and handling recommendations. Keep tightly closed.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls	Source	Material	Measurement	Limit
	New Zealand WES 2020	total dust	time weighted average (TWA)	10 mg/m ³
	New Zealand WES 2020	respirable dust	time weighted average (TWA)	3 mg/m ³
No exposure limits set by WorkSafe New Zealand or Safe Work Australia.				
Ventilation system	Remove dust as necessary. Refer to the 'Local exhaust ventilation' guide found on the WorkSafe New Zealand website.			
Personal Respirators	Respirators are not required, however, if in doubt, seek expert occupational hygiene advice. AS/NZS 1715:2009 and AS/NZS 1716:2012. An approved dust mask e.g. a P1 respirator is recommended when using this product in dusty conditions. See Australian/New Zealand Standard, AS/NZS 1715:2009 and AS/NZS 1716:2012.			
Skin Protection	Wear impervious protective clothing, including covered shoes, nitrile rubber gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.			
Eye Protection	Use chemical safety goggles or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.			

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Crystalline solid.	Solubility in water (g/L)	710
Molecular Weight	246.48	pH (5% w/v solution)	5.0-9.2
Melting Range (°C)	1124 decomposes, loses all waters of hydration @ 250°C	Specific Gravity (water=1)	1.67

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions To Avoid	Avoid excessive heat, direct sunlight, static discharges, moisture, freezing and high temperatures. Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Incompatible Materials	Incompatible with acids, ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium and calcium. Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Hazardous Decomposition	No decomposition if stored under normal conditions of use. Thermal decomposition can lead to release of sulphur oxides.
Hazardous Reactions	Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute health effects	<p>SWALLOWED Health injuries are not known or expected under normal use. Acts as a laxative. Large amounts may cause nausea and vomiting.</p> <p>EYE Dust may cause mild irritation.</p> <p>SKIN This material may cause skin irritation following contact.</p> <p>INHALED Inhalation of dust may lead to respiratory irritation. Good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.</p>
Chronic health effects	<p>No data available.</p> <p>TOXICITY AND IRRITATION DATA</p> <p>TOXICITY Acute Oral Toxicity, Rat, LD50: >2000 mg/kg [Manufacturer] Acute Dermal Toxicity, LD50: >2000 mg/kg [Manufacturer] Acute Inhalation Toxicity, LC50: Not available</p> <p>IRRITATION Nil Reported. Persons with pre-existing conditions may be more susceptible. Sensitisation (respiratory/contact): Not available. Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Reproductive or developmental effects: Not available. Aspiration hazard: Not available. Specific target organ toxicity: Not available.</p>

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	No data available.
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TOXICITY DATA

Fish, (*Gambusia affinis*), 96hr LC50: 15500 mg/L [Manufacturer]
Crustacean, (*Daphnia magna*), 24hr EC50: 1700 mg/L [Manufacturer]
Algae (*Desmodesmus subspicatus*), 72hr EC50: 2700 mg/L [Manufacturer]

Persistence and Degradability

Not applicable to inorganic substances.

Mobility

Soluble in water.

Environmental Fate (Exposure)

No data available. Do not allow product to enter drains, waterways or sewers.

Bioaccumulative Potential

No information available on bioaccumulation for this product.

SECTION 13 DISPOSAL CONSIDERATION

Recycle wherever possible.

Disposal Methods	<p>Consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</p> <p>Dispose of by: Burial in a licensed landfill or Incineration in a licensed apparatus (after admixture with suitable combustible material).</p> <p>Empty contaminated packaging should be taken for local recycling, recovery or waste disposal.</p>
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SECTION 14 TRANSPORT INFORMATION

Classification:	<p>NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land.</p>
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SECTION 15 REGULATORY INFORMATION

REGULATIONS

Non-hazardous.

Controls applying to this substance are:

None, not hazardous.

Magnesium sulphate heptahydrate, CAS Number 10034-99-8, is found on the following inventories:

TSCA, AIC, DSL, ENCS, NZIoC

SECTION 16 OTHER INFORMATION

The information contained in this Safety Data Sheet is obtained from current and reliable sources. Pure Ingredients Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product but does not claim to be all inclusive. This document is intended only as a guide to the appropriate handling of this material.

Reference: supplier's SDS.

Revision 00-03/07/2019 Magnesium Sulphate SA082 0001042016 New Issue.

Revision 01-04/05/2020 PIL SDS Change of address – no changes to SDS.

Revision 02-25/06/2021 updated to reflect changes in supplier's SDS.

Pure Ingredients Ltd