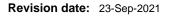
SAFETY DATA SHEET





Revision Number 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER		
Product identifier		
Product Name	MAGNESIUM SULPHATE HEPTAHYDRATE	
Product Code(s)	000031564201	
Other means of identification		
CAS No.	10034-99-8	
Synonyms	Magnesium sulfate heptahydrate; Magnesium sulphate, heptahydrate; Epsom salt; Epsomite.	
Recommended use of the chemical and restrictions on use		
Recommended use	Quick-acting fertilizer; in construction, pulp and detergent industries; for the production of certain plastics, adhesives, refractory materials.	
Uses advised against	No information available.	
Details of the supplier of the safety	data sheet	
<u>Supplier</u> Ixom Operations Pty Ltd (Incorporated in Australia) NZBN: 9429041465226 Address: 166 Totara Street Mt Maunganui South New Zealand		
Telephone Number: +64 9 368 2700 Facimile: +64 9 368 2710		
For further information, please contact		
Contact Point	Product Safety Department	
Emergency telephone number		
Emergency Telephone	0 800 734 607 (ALL HOURS)	
Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.		

2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS Classification

Label elements

Hazard statements

Other hazards which do not result in classification

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
Magnesium sulfate heptahydrate	10034-99-8	99

4. FIRST AID MEASURES

Description of first aid measures

Emergency telephone number	Poisons Information Center, New Zealand: 0800 764 766 Poisons Information Center, Australia: 13 11 26	
Inhalation	Remove to fresh air. Call a physician if symptoms occur.	
Eye contact	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.	
Skin contact	Wash with plenty of water. Get medical attention if symptoms occur.	
Ingestion	Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	
5. FIRE FIGHTING MEASU Suitable Extinguishing Media	RES	
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.	
Unsuitable extinguishing media	No information available.	
Specific hazards arising from the chemical		
Specific hazards arising from the		
chemical	Non-combustible.	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Wash thoroughly after handling.	
For emergency responders	Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. After cleaning, flush away traces with water.	
Precautions to prevent secondary hazards		

Clean contaminated objects and areas thoroughly observing environmental regulations. Prevention of secondary hazards

7. HANDLING AND STORAGE	

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. Use personal protection equipment. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible materials Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for particulate(s):

Particulates not otherwise classified: 8hr WES-TWA 10 mg/m3 (inhalable dust) or 3 mg/m3 (respirable dust)

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

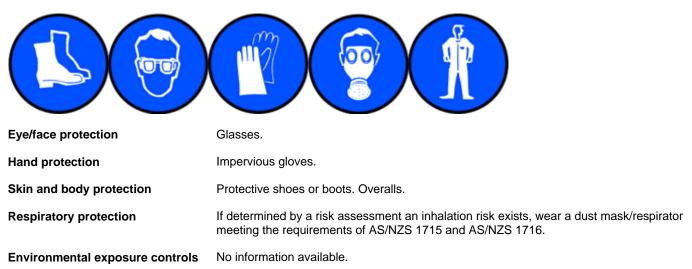
Engineering controls Apply technical measures to comply with the occupational exposure limits.

> If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	No information available.
Color	White
Odor	Odourless
Odor threshold	No information available.

Property_
pH
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate

Values 6-8 No data available No data available Not applicable No data available

Remarks • Method None known

None known None known None known None known

Flammability (solid, gas)	No data available	None known None known
Flammability Limit in Air Upper flammability or explosive limits	No data available	NOTE KTOWT
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.08 (Bulk density)	None known
Water solubility	Soluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information Molecular formula	MgSO4.7H2O	

10. STABILITY AND REACTIVITY

Reactivity	
Reactivity	No information available.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Possibility of hazardous reactions	
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	
Conditions to avoid	Dust formation.
Incompatible materials	
Incompatible materials	Acids.
Hazardous decomposition products	<u>.</u>
Hazardous decomposition products	oxides of sulfur. Oxides of magnesium.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information

No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the

	chemical is mishandled and overexposure occurs are:
Inhalation	May cause irritation.
Eye contact	Dust contact with the eyes can lead to mechanical irritation.
Skin contact	May cause irritation.
Ingestion	Produces a laxative effect. Swallowing large amounts may lead to heart changes, flaccid paralysis and cyanosis.
Symptoms	No information available.
Acute toxicity	

Numerical measures of toxicity No information available.

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Ecotoxicity	Keep out of waterways.
Terrestrial ecotoxicity	There is no data for this product.

Bioaccumulative potential

Bioaccumulation	No information available.		
<u>Mobility</u>			
Mobility in soil	No information available.		
Other adverse effects			
Other adverse effects	No information available.		
13. DISPOSAL CONSIDERATIONS			
Waste treatment methods			
Waste from residues/unused products	Dispose of in accordance with federal, state and local regulations.		
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.		
	ΑΤΙΟΝ		
14. TRANSPORT INFORM	ATION		
ROAD AND RAIL TRANSPORT	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.		
IATA	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.		
IMDG	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.		

15. REGULATORY INFORMATION

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

New Zealand	
National regulations	See section 8 for national exposure control parameters
International Inventories NZIoC TSCA DSL/NDSL EINECS/ELINCS ENCS IECSC KECL PICCS AIIC	This material is listed on the New Zealand Inventory of Chemicals. Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. This material is listed on the Australian Inventory of Industrial Chemicals.

Legend:

NZIOC - New Zealand Inventory of Chemicals

- **TSCA** United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** Japan Existing and New Chemical Substances
- **IECSC** China Inventory of Existing Chemical Substances
- KECL Korean Existing and Evaluated Chemical Substances
- PICCS Philippines Inventory of Chemicals and Chemical Substances

- Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATIO	N
Prenared By	This Safety Data Sheet has been prepared by Ivom Operations Pty I to (Tovicology and

Fiepaleu Dy	SDS Services).
Issuing Date:	23-Sep-2021
Reason(s) For Issue:	5 Yearly Revised Primary SDS

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legenu	The Section 6. EXPOSORE CONTROLS/FERSONAL FROTECTION		
TWA	TWA (time-weighted average)	STEL	
Ceiling	Maximum limit value	*	
С	Carcinogen		

STEL (Short Term Exposure Limit) Skin designation

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet