



SAFETY DATA SHEET

Version 1.0
Issue Date: 14 July 2022

1. Substance and Supplier Identification

Product Name:	Epsom Salts
Other Names:	Magnesium Sulphate Heptahydrate; Sulphuric Acid, Magnesium (II) Salt Heptahydrate; Epsotop; Bittersalz.
Supplier:	Morton Smith-Dawe Ltd 396 Wigram Road Halswell Christchurch, New Zealand P.O Box 37-139 Halswell, Christchurch
Customer Centre:	(03) 322 8117
Recommended Use:	Fertiliser additive
In Case of Emergency Contact:	
National Poisons Centre:	0800 POISON (0800 764 766)
Transport Emergency:	111 – Tell operator what service is needed: Fire, Ambulance or Police.

2. Hazard Identification

This product is not classified as hazardous according to criteria in the New Zealand Hazardous Substances (Hazard Classifications) Notice 2020.

This product is not a Dangerous Goods for Transport. Refer to Section 14 for details.

Classification and Statements:

GHS Classification: Not applicable

HSNO Classification: Not applicable

Labelling Elements:

Hazard Statements: None

Signal Word: None

GHS Pictograms: None

PREVENTION STATEMENTS: None

RESPONSE STATEMENTS: None

STORAGE STATEMENTS: None

DISPOSAL:

Consumer packaging may be disposed of to standard household waste.

3. Composition/ Information on Ingredients

Single Substance: Magnesium Sulphate Heptahydrate 95 - 100%

CAS No: 10034-99-8

4. First Aid Measures

Workplace Facilities Required:	Hand washing facilities should be provided at workplaces.
If Inhaled:	Remove to fresh air. Seek medical attention if symptoms persist.
In Contact with Eye:	Hold eyes open, flush continuously with water for at least 15 minutes. Seek medical attention if irritation develops and persists.
In Contact with Skin:	Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if skin irritation develops and persists.
If Swallowed:	DO NOT INDUCE VOMITING. Rinse mouth. If conscious give small quantities of water. Never give anything by mouth to an unconscious person. Seek medical advice. If vomiting occurs, keep head below hips to prevent aspiration to lungs.
Advice to Doctor:	Treat symptomatically.

5. Fire Fighting Measures

Fire/Explosion Hazard: Product is not flammable or combustible.

Suitable Extinguishing Media: Use extinguisher suitable for surrounding fire.

Precautions in Connection with Fire: May give off toxic fumes in a fire, containing sulphur and magnesium oxides.

Advice for firefighters: Wear firefighting gear suitable for surrounding fire.

6. Accidental Release Measures

Personal Precautions: Avoid generating dust. For large spills, emergency responders must use personal protective equipment, including gloves, protective clothing and safety glasses with side shields or safety goggles. Respiratory protection may be required where there is inadequate ventilation and high dust concentrations. For small spills, wear eye protection and gloves.

Spill Clean-Up Procedure: Sweep up spills and place in a suitable, closable chemical waste container. Ensure waste container is properly labelled. Residues may be washed away with water.

Waste Disposal: Refer to Section 13.

Emergency Preparation: Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

7. Handling and Storage

Handling: Avoid generating dust. Avoid breathing dust. Do not eat, drink, or smoke, when using this product. Remove contaminated clothing and wash hands and face before entering eating areas.

Storage: Store in a cool, dry, well-ventilated place. Keep containers closed when not in use. Keep out of reach of animals and children.

8. Exposure Controls and Personal Protection

Workplace Exposure Standards NZ:

Particulates, not otherwise specified, TWA 10 mg/m³ (inspirable dust), 3 mg/m³ (respirable dust)

Engineering Controls: Handwashing facilities should be provided in the work area. For typical conditions of storage and use, natural ventilation should be adequate. In enclosed areas, mechanical ventilation may be required if high volumes of dust are generated.

Personal Protective Equipment: Avoid inhaling dust.

Hand protection:	Gloves are recommended when handling especially for large quantities. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.
Skin and body protection:	Use protective clothing when handling large quantities. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.
Eye protection:	Use eye protection when handling such as safety glasses with side shields. Refer to AS/NZS 1336 for suitable eye protection.
Respiratory protection:	Dust mask rated at least P1 if a high volume of dust is generated. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Other information:	PPE selected must be impervious to the substance. Do not eat, smoke, or drink where material is handled, processed, or stored. Wash hands carefully before eating or smoking. Handle in accordance with safe industrial hygiene practices.

9. Physical and Chemical Properties

Description:	Crystal or powder	Colour:	Colourless to white
Odour:	Odourless	Odour Threshold:	Not determined
pH (20°C):	5-8 (5% w/v solution)	Solubility (water, 25°C):	Soluble
Melting Point:	Loses all water of hydration at 250°C. Decomposes at 1124°C	Boiling point:	Not determined
Flammability:	Non-flammable	Flash Point (Closed Cup):	Not applicable
UEL/LEL:	Not applicable	Bulk Density:	Not available
Relative Density:	1.05 (water = 1)	Vapour Density:	Not determined
Vapour pressure (at 25°C):	Not determined	Viscosity:	Not applicable
Decomposition Temp:	1124°C	Autoignition Temp:	Not applicable
Octanol/Water Partition Coefficient:	Not applicable	Particle characteristics:	Not available

10. Stability and Reactivity

Stability:	Stable under normal storage conditions.
Reactivity:	Not expected to be reactive.
Conditions to Avoid:	Dust formation. Accumulation of large quantities of dust may result in a dust explosion. High temperatures, heat. High humidity.

Incompatibility:	Incompatible with ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium, and calcium.
Hazardous Polymerisation:	Will not occur.
Hazardous Decomposition:	May form toxic fumes containing oxides of sulphur and magnesium.

11. Toxicological Information

Acute Exposure

Acute Toxicity:	LD ₅₀ oral > 2000 mg/kg LD ₅₀ dermal > 2000 mg/kg LC ₅₀ inhalation > 5 mg/L (dust)
Inhalation:	Inhalation of dust may cause mechanical irritation of respiratory tract, resulting in coughing, sneezing.
Ingestion:	Ingestion of large quantities may cause nausea, vomiting, diarrhoea, flushing of the skin, thirst hypertension, and respiratory depression. May have a laxative effect.
Skin Contact:	Not expected to be irritating to skin.
Eye Contact:	Not expected to be irritating to eyes. May cause mechanical eye irritation if powder gets into eyes.
Sensitiser:	Not expected to be a respiratory or contact sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant	No chronic toxicity effects expected.
Specific Target Organ Systemic Toxicity:	Not expected to be toxic to target organs or systems.

12. Ecological Information

Ecotoxicity:	Not expected to be ecotoxic. Avoid unintended losses to the environment wherever possible.
Aquatic toxicity:	LC ₅₀ >100mg/l
Biodegradable:	Expected to be biodegradable.
Bioaccumulative:	Not expected to be bioaccumulative.
Mobility:	Product is soluble in water.

13. Disposal Considerations

Disposal:	Recycle where possible. Dispose of waste product via an approved waste disposal contractor.
Disposal of Packaging:	Dispose of packaging via an approved waste disposal contractor. Consumer packaging may be disposed of via household waste.

14. Transport Information

This product is not classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.

Ensure transportation methods prevent leakage from packages and collapsing loads.

15. Regulatory Information

Group Standard Allocation: Not applicable

HSNO Approval Code: Not applicable

NZ Inventory of Chemicals: Not applicable

This substance triggers:	Location/Compliance Certificate	N/A
	Certified Handler	N/A
	Emergency Response Plan	N/A
	Secondary Containment	N/A
	Signage	N/A

This substance is not classified as hazardous in accordance with the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

16. Other Information

The information provided in this Safety Data Sheet relates only to the specific material designated herein. The information contained in this Safety Data Sheet is correct to the best of our knowledge.

This substance is non-hazardous.

SDS Created: 14 July 2022

Review Date: 14 July 2027

Reason for Revision: Update of SDS.

It is known that people have varying degrees of sensitivity to chemicals therefore this product should be used with caution.

The information compiled in this Safety Data Sheet has been taken from sources believed to be reliable by Morton Smith-Dawe Ltd and to represent the most up-to-date knowledge available at the date given in Section 16.

Morton Smith-Dawe Ltd assumes no liability for any damages related to the use or misuse of this substance.

End of Safety Data Sheet