

SAFETY DATA SHEET

Version 2.0 Issue Date: 28 April 2025

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

12 Kairua Road

Hornby

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.

Use eye protection when handling such as safety glasses with side shields. Eye protection:

Refer to AS/NZS 1336 for suitable eye protection.

Dust mask rated at least P1 if a high volume of dust is generated. Refer to Respiratory protection:

> 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.

PPE selected must be impervious to the substance. Do not eat, smoke, or Other information:

> 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

Colourless to Description: Crystal or powder Colour: white

Odour: Odourless Odour Threshold: Not determined

pH (20°C): 5-8 (5% w/v solution) Solubility (water, 25°C): Soluble

Loses all water of hydration at

Melting Point: 250°C. Decomposes at

1124°C

Flammability: Non-flammable Flash Point (Closed Cup): Not applicable **UEL/LEL:** Not applicable **Bulk Density:** Not available 1.05 (water = 1)Vapour Density: Relative Density: Not determined Vapour pressure (at Not determined Viscosity: Not applicable

25°C):

Decomposition Temp: 1124°C

Octanol/Water Partition

Coefficient:

Not applicable

Autoignition Temp:

Boiling point:

Particle characteristics: Not available

Not determined

Not applicable

10. Stability and Reactivity

Stability: Stable under normal storage conditions.

Reactivity: Not expected to be reactive.

Dust formation. Accumulation of large quantities of dust may result in a dust **Conditions to Avoid:**

explosion. High temperatures, heat. High humidity.

Incompatible with ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, Incompatibility:

barium, strontium, and calcium.

Hazardous Polymerisation: Will not occur.

May form toxic fumes containing oxides of sulphur and magnesium. **Hazardous Decomposition:**

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 Corrosion/Irritation: Not expected to be corrosive or irritating to skin.

Serious Eye Damage/Eye

Irritation:

Not expected to be corrosive or irritating to eyes. May cause mechanical

eye irritation if powder gets into eyes.

Respiratory or Contact Sensitiser: Not expected to be a respiratory or contact sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive

Toxicant

No information available. Product is not expected to be mutagenic,

carcinogenic or a reproductive toxicant.

Specific Target Organ Toxicity

Single Exposure:

No information available. Not expected to be a specific target organ

toxicant by single exposure.

Specific Target Organ Toxicity

Repeated Exposure:

No information available. Not expected to be a specific target organ

toxicant by repeated exposure.

Aspiration Hazard: No information available. Not expected to be an aspiration hazard.

12. Ecological Information

Ecotoxicity: Not expected to be ecotoxic. Avoid unintended losses to the environment

wherever possible.

Aquatic toxicity: $LC_{50} > 100 mg/l$

Biodegradable: Expected to be biodegradable.

Bioaccumulative: Not expected to be bioaccumulative.

Mobility in soil: Product is soluble in water.

Other adverse effects: None known.

Ingredients with ecotoxic

classifications:

There are no ingredients with ecotoxic classifications.

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: No

Not applicable

NZ Inventory of Chemicals:

Not applicable

This substance

triggers:

Location/Compliance Certificate
Certified Handler

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

N/A

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: 28 April 2025 Review Date: 28 April 2030

Supersedes: 14 July 2022

Reason for Revision: New address details. Update headings in Sections 11 & 12

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