

Safety Data Sheet **MAGNESIUM SULFATE Dried**

SDS no. KKKTNEDS • Version 1.0 • Date of issue: 2024-02-27

SECTION 1: Identification

GHS Product identifier

Product name MAGNESIUM SULFATE Dried

Other means of identification

Epsom salts,
Bitter salts,
Magnesium sulfate anhydrous
MAGNESIUM SULFATE Dried ML073

Recommended use of the chemical and restrictions on use

Fireproofing, textiles, mineral waters, catalyst carrier, ceramics, fertilizers, paper, cosmetic lotions, dietary supplement, antacid, laxative and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 120.37

Components

Component	CAS no.	Concentration
Magnesium sulfate anhydrous (EC no.: 231-298-2)	7487-88-9	60 - 100 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	Remove to fresh air and if discomfort persists, seek medical assistance.
In case of skin contact	Remove any contaminated clothing. Wash the affected area with water, then soap and water for at least 15 minutes. If irritation develops or persists, seek medical advice.
In case of eye contact	Wash thoroughly with running water. If irritation develops, seek medical advice.
If swallowed	Rinse mouth. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a poison center or doctor if you feel unwell.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use fire extinguishing media appropriate for surrounding environment. Use water spray, dry chemical, carbon dioxide, or appropriate foam. This material is substantially water.

Specific hazards arising from the chemical

Material does not burn.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for safe handling

Keep containers securely sealed and protected against physical damage. Store in a cool, dry place. Store in well ventilated area.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state
Appearance

Solid
Colourless crystals or white powder.

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Color	No data available.
Odor	No data available.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	1124 °C
Oxidizing properties	No data available.
pH	~ 7.9 (50 g/l, H ₂ O, 25 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: 450 g/l (40 °C) Solubility in Organic Solvents: Soluble in glycerol. Sparingly soluble in alcohol.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	< 0.1 mmHg (20 °C)
Evaporation rate	No data available.
Density and/or relative density	[14] Specific Gravity: 2.66
Relative vapor density	< 0.01 g/l
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under ordinary conditions of use and storage.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

Conditions to avoid

Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidising agents, ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium and calcium.

Hazardous decomposition products

Sulfur oxides and magnesium oxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Magnesium salts are slowly absorbed. Symptoms may include abdominal pain, vomiting, diarrhea, flushing of the skin, thirst and hypotension. If elimination is blocked by bowel blockage or other reasons, CNS depression, lack of reflexes, hypocalcemia (deficiency of calcium in the blood) may occur.

Inhalation: Dust may be slightly irritating. Sore throat or coughing may occur. May be harmful.

Skin corrosion/irritation

No adverse effects expected but dust may cause minor skin irritation. May be harmful if absorbed through the skin.

Serious eye damage/irritation

No adverse effects expected but dust may cause mechanical irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: In general, this material is normally excreted rapidly from the body and only a small proportion of magnesium salts ingested are absorbed by the bloodstream. Cases of poisoning have arisen where these materials have been used medicinally and the patient has a damaged alimentary tract or impaired renal function, resulting in the rapid absorption of magnesium ions into the bloodstream. The central nervous system and gastrointestinal system are targeted.

SECTION 12: Ecological information

SECTION 13: Disposal considerations

Disposal methods

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Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

Canadian Domestic Substances List (DSL)

Chemical name: Sulfuric acid magnesium salt (1:1)

CAS: 7487-88-9

Chemical name: Sulfuric acid magnesium salt (1:1), heptahydrate

CAS: 10034-99-8

SECTION 16: Other information

Further information/disclaimer

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

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National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)