



Safety Data Sheet

Magnesium Sulfate Heptahydrate

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Magnesium Sulfate Heptahydrate
Product number Brand	MAGSUL- 500g, 1kg, 2.5kg, 5kg, Hurstchem

1.3 Recommended use of the chemical and restrictions on use

Laboratory Reagent

1.4 Supplier's details

Name	Hurst Scientific
Address	2 Transit Place 6112 Forrestdale Wa Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

1.5 Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

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

2.1 Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 8

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Classified as a NON-Dangerous goods according to the ADG Code for the Transport of Dangerous Goods by

Safety Data Sheet

Magnesium Sulfate Heptahydrate

Road and Rail (7th Edition).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Magnesium sulfate Heptahydrate

Concentration	100 % (weight)
EC no.	231-298-2
CAS no.	10034-99-8

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases. Seek medical attention.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. If irritation develops, seek medical attention.
In case of eye contact	Flush eyes with copious amounts of water for at least 15 minutes. If irritation develops or persists, seek medical attention.
If swallowed	DO NOT induce vomiting. Wash mouth out with copious amounts of water and seek medical attention.
Personal protective equipment for first-aid responders	Treat Symptomatically

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use media suitable for other material involved in fire.

5.2 Specific hazards arising from the chemical

Toxic gases may evolve.

5.3 Special protective actions for fire-fighters

Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment to avoid exposure. Ensure adequate ventilation and avoid dust generation and contact with skin and eyes.

Safety Data Sheet

Magnesium Sulfate Heptahydrate

6.3 Methods and materials for containment and cleaning up

Sweep up material and place into a suitably labelled container for later disposal. Wash the affected area with water. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in an adequately ventilated area. Avoid breathing in dust. Wear appropriate protective clothing and practice good personal hygiene.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Ensure an adequate ventilation or exhaust system is in place.

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

Eye/face protection

Safety glasses or goggles.

Skin protection

Gloves and laboratory coat.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Appearance	Colourless, transparent crystals or white powder
Color	White
Odor	Odourless
Melting point/freezing point	2000C (loses water of crystallisation)
Boiling point or initial boiling point and boiling range	Not available
Flammability	Non-combustible
Lower and upper explosion limit/flammability limit	Not applicable
pH	5.0 - 8.0
Kinematic viscosity	
Solubility	Water soluble, slightly soluble in Alcohol, soluble in glycerol
Vapor pressure	<0.133 hPa @ 200C
Density and/or relative density	1.67
Relative vapor density	Not available

SECTION 10: Stability and reactivity

10.1 Reactivity

Non-reactive under recommended conditions for use and storage.

10.2 Chemical stability

Stable under recommended conditions for use and storage. Hygroscopic.

Safety Data Sheet

Magnesium Sulfate Heptahydrate

10.3 Possibility of hazardous reactions

Polymerisation will not occur.

10.4 Conditions to avoid

Direct sunlight, moisture and excessive heat.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Toxic gases may evolve (Oxides of Magnesium and Sulphur)

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Oral LD₅₀ (Mouse): 5000 mg/kg (Anhydrous)

Skin corrosion/irritation

No classification.

Serious eye damage/irritation

No classification.

Respiratory or skin sensitization

No classification.

Germ cell mutagenicity

No classification.

Carcinogenicity

Not an IARC listed material.

Reproductive toxicity

No classification.

Specific target organ toxicity (STOT) - single exposure

No classification.

Specific target organ toxicity (STOT) - repeated exposure

No classification.

Aspiration hazard

No classification.

Additional information

HEALTH EFFECTS:

Eye Contact Can cause abrasive irritation, otherwise no adverse effects expected.

Skin Contact No adverse effects expected but dust can cause minor irritation, may be harmful if absorbed through the skin.

Inhalation Irritation of the upper respiratory tract may occur causing coughing, headache, dizziness and nausea.

Ingestion Magnesium salts are slowly absorbed. Can cause nausea and vomiting, abdominal pain and diarrhoea.

Safety Data Sheet

Magnesium Sulfate Heptahydrate

SECTION 12: Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not expected to bio-accumulate.

Mobility in soil

Not available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of in accordance with local authority guidelines.

Packaging disposal

Dispose of in accordance with local authority guidelines.

SECTION 14: Transport information

14.1	UN Number	None
14.2	UN Proper Shipping Name	None
14.3	Transport hazard class(es)	None
14.4	Packing group	None
14.5	Environmental hazards	None
14.6	Special precautions for user	None
14.7	Transport in bulk according to IMO instruments	None

SECTION 15: Regulatory information

15.2 Chemical Safety Assessment

- Poison Schedule: Not scheduled.
- TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

SECTION 16: Other information

16.1 Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Copyright © 2024 Hurst Scientific

16.2 Preparation information

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).

Safety Data Sheet
Magnesium Sulfate Heptahydrate

3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).