

SDS no. NCELS1CV • Version 1.0 • Date of issue: 2025-06-08

SECTION 1: Identification

GHS	Product	identifier
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Product name	MAGNESIUM CHLORIDE Hexahydrate
Other means of identification	

Product	Product Code	
Magnesium Chloride Hexahydrate AR	MA029	
Magnesium Chloride Hexahydrate AR	MP029	
Magnesium Chloride Hexahydrate LR	ML029	
Magnesium Chloride Hexahydrate flakes TG	MT029	
Magnesium Chloride Hexahydrate AR	MP248	

Recommended use of the chemical and restrictions on use

Laboratory reagent, source of magnesium metal, disinfectants, fire extinguishers, fireproofing wood, magnesium oxychloride cement, refrigerating brines, ceramics, cooling drilling tools, textiles (size, dressing and filling of cotton and woolen fabrics, thread lubricant, carbonization of wool), paper manufacture, road dust-laying compounds, floor-sweeping compounds, flocculating agent, analytical chemistry and catalyst.

Supplier's details

Name Address	ChemSupply Australia Pty Ltd 38-50 Bedford Street 5013 Gillman South Australia Australia	
Telephone email	08 8440 2000 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: 203.3

Components

Component	CAS no.	Concentration
Magnesium chloride Hexahydrate	7791-18-6	<= 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	If inhaled, remove from contaminated area to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Irrigate the affected eye(s) with cold running water for 15 minutes. If irritation or soreness persists seek medical assistance.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

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

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO2, water spray or foam. Large fire: Use water spray, fog or foam.

If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific hazards arising from the chemical

May liberate toxic fumes in fire including Hydrochloric acid, hydrogen chloride gas, magnesium oxide.

Material does not burn. Runoff may pollute waterways. Fire or heat may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.

Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. For personal protection see section 8.

Methods and materials for containment and cleaning up

Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains, or confined areas. Water spray may be used to knock down or divert vapour clouds. Prevent dust cloud.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Moisture sensitive. Hygroscopic.

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

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

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

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold Melting point/freezing point Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit/flammability limit Flash point Explosive properties Auto-ignition temperature Decomposition temperature Oxidizing properties рΗ Kinematic viscosity Solubility

Partition coefficient n-octanol/water (log value) Vapor pressure Evaporation rate Density and/or relative density Relative vapor density Particle characteristics

Supplemental information regarding physical hazard classes No data available.

Further safety characteristics (supplemental)

Other Information: Decomposes to oxychloride.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Moisture sensitive, hygroscopic.

Possibility of hazardous reactions

None under normal use conditions.

Solid White to colourless crystals. No data available. Odourless No data available. Loses 2H2O at 100 °C, if heated rapidly melts at 116-118 °C. No data available. >117 °C (release of crystalline water) No data available. 5.0 - 6.5 (50 a/l, H20, 20 °C). No data available. Solubility in Water: Soluble (1670 g/L @ 20 °C) Solubility in Organic Solvents: Soluble in alcohol. No data available. No data available. No data available. Specific Gravity: 1.57 No data available. No data available.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Strong heating.

Incompatible materials

Strong oxidizing agents, moisture.

Hazardous decomposition products

May liberate toxic fumes in fire including Hydrochloric acid, hydrogen chloride gas, magnesium oxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 8.1 g/kg

Ingestion: Magnesium salts are slowly absorbed into the body. Symptoms may include abdominal pain, vomiting, diarrhea. However, if elimination is blocked by bowel blockage or other reasons, CNS depression, lock of reflexes, hypocalcemia (deficiency of calcium in the blood) may occur.

Inhalation: Irritating to mucous membrane and respiratory system. Symptoms may include metal-fume fever after inhalation of large quantities.

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

No adverse effects expected but dust may cause mechnical irritation.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity Not classified based on available information.

Carcinogenicity Not classified based on available information.

Reproductive toxicity Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

Systemic effects: drop in blood pressure, cardiac dysrhythmia, muscular weakness, paralysis symptoms, tiredness. Can cause CNS depression. Exposure can cause: stomach pains, vomiting, diarrhea.

SECTION 12: Ecological information

Toxicity

Short Summary of Assessment of Environmental Impact: No ecological problems are to be expected when the product is handled and used with due care and attention.

Persistence and degradability

Methods for the determination of biodegradability are not applicable to inorganic substances.

SECTION 13: Disposal considerations

Disposal methods

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

SECTION 16: Other information

Further information/disclaimer

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

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 fot 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 Airbourne 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)