

Material Safety Data Sheet

An electronic version of this MSDS is available at the following web address:
<http://www.compassminerals.com>



Magnesium chloride aqueous solution

Section 1. Product and Company Identification

Common Name	Magnesium chloride aqueous solution	Code	: Not available.
Supplier	Compass Minerals Group 8300 College Boulevard Overland Park, KS 66210, USA	MSDS#	: Not available.
Synonyms	Magnesium chloride brine, Mag chloride solution, magnesium dichloride 25-35% solution.	Preparation Date	: 1/15/2003.
Trade name	DustGard, FreezGard, ChloraMag, High Purity Brine, JR7A	Print Date	: 1/15/2003.
Material Uses	Dust suppression, deicing, general industrial, and speciality uses.		
Manufacturer	Great Salt Lake Minerals Corporation 8300 College Boulevard Overland Park, KS 66210, USA (913) 344-9100	In Case of Emergency	: Canada: CANUTEC-1-613-996-6666 US: CHEMTREC-1-800-424-9300

Section 2. Composition, Information on Ingredients

Name	CAS #	Exposure Limits
Water	7732-18-5	Not available.
Magnesium chloride hexahydrate	7791-18-6	TWA PEL: No specific limits have been established for magnesium chloride (a soluble substance). As a guideline, OSHA (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates Not Otherwise Regulated (PNOR): 5mg/cu.m. Respirable Dust 8-Hour TWA PEL, 15mg/cu.m. Total Dust 8-Hour TWA PEL. TWA TLV: No specific limits have been established for magnesium chloride (a soluble substance). As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insolubles) Not Otherwise Classified (PNOC): 10mg/cu.m. Inhalable Particulate TWA TLV, 3mg/cu.m. Respirable Particulate TWA TLV.

(May contain multiple proprietary components, individually less than 1%, for purposes of corrosion inhibition).

Section 3. Hazards Identification

Emergency Overview : Liquid.

CONTAINS MATERIAL WHICH MAY CAUSE EYE IRRITATION.

Routes of Entry : Absorbed through skin. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes : Slightly hazardous in case of eye contact (irritant).

Skin : Non-irritant for skin.

Inhalation : Slightly hazardous in case of inhalation (lung irritant).

Ingestion : Not available.

Potential Chronic Health Effects : Carcinogenic Effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.

Medical Conditions Aggravated by Overexposure : Repeated or prolonged exposure is not known to aggravate medical condition.

Potential Environmental Effects : May be harmful to freshwater aquatic species and to plants that are not saline tolerant.

[See Toxicological Information \(section 11\)](#)

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Section 4. First Aid Measures

- Eye Contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Obtain medical attention if irritation occurs.
- Skin Contact** : Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Obtain medical attention if irritation occurs.
- Ingestion** : Do not induce vomiting. Rinse mouth with water. NEVER give an unconscious person anything to ingest. Obtain medical attention.
- Notes to Physician** : Not available.

Section 5. Fire Fighting Measures

- Flammability of the Product** : Non-flammable.
- Autoignition Temperature** : Not available.
- Flash Points** : Not available.
- Flammable Limits** : Not available.
- Products of Combustion** : Not applicable.
- Fire Hazards in Presence of Various Substances** : Not available.
- Explosion Hazards in Presence of Various Substances** : Risks of explosion of the product in presence of mechanical impact: Not applicable.
Risks of explosion of the product in presence of static discharge: Not applicable.
- Fire Fighting Media and Instructions** : Use extinguishing media suitable for surrounding materials.
- Protective Clothing (Fire)** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Special Remarks on Fire Hazards** : Not available.
- Special Remarks on Explosion Hazards** : Not available.

Section 6. Accidental Release Measures

- Small Spill and Leak** : Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
- Large Spill and Leak** : Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

- Handling** : Avoid breathing vapors or spray mists. Avoid contact with incompatibles.
- Storage** : Keep container tightly closed.

Section 8. Exposure Controls, Personal Protection

- Engineering Controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station on location.
- Personal Protection**
- Eyes** : Safety glasses.
- Body** : Lab coat.
- Respiratory** : Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Section 9. Physical and Chemical Properties

- Physical State and Appearance** : Liquid.
- Color** : Colorless.
- Odor** : Odorless.
- Molecular Weight** : Not applicable.
- Molecular Formula** : Not applicable.
- pH (5% Soln/Water)** : 7 to 9 [Basic.]
- Boiling/Condensation Point** : 107.22°C (225°F)
- Melting/Freezing Point** : May start to freeze at -27°F.
- Critical Temperature** : Not available.

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Specific Gravity	: 1.24 to 1.34 (Water = 1)
Vapor Pressure	: Not available.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Evaporation Rate	: Not available.
VOC	: Not available.
Viscosity	: Not available.
LogK_{ow}	: Not available.
Solubility	: Easily soluble in cold water, hot water, methanol, acetone.

Section 10. Stability and Reactivity

Stability and Reactivity	: The product is stable.
Conditions of Instability	: Not available.
Incompatibility with Various Substances	: Reactive with oxidizing agents, acids.
Hazardous Decomposition Products	: These products are halogenated compounds, hydrogen chloride.
Hazardous Polymerization	: Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	: LD50: Not available. LC50: Not available.
Chronic Effects on Humans	: Carcinogenic Effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Contains material which may cause damage to the following organs: eyes.
Other Toxic Effects on Humans	: Slightly hazardous in case of eye contact (irritant), of inhalation (lung irritant). Non-irritant for skin.
Special Remarks on Toxicity to Animals	: Not available.
Special Remarks on Chronic Effects on Humans	: Not available.
Special Remarks on Other Toxic Effects on Humans	: Not available.

Section 12. Ecological Information

Ecotoxicity	: May be harmful to freshwater aquatic species and to plants that are not saline tolerant.
BOD and COD	: Not available.
Biodegradable/OECD	: Not available.
Mobility	: Not available.
Products of Degradation	: These products are halogenated compounds. Some metallic oxides.
Toxicity of the Products of Biodegradation	: The products of degradation are more toxic than the product itself.
Special Remarks	: Not applicable.

Section 13. Disposal Considerations

Waste Information	: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	: Not available.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label
DOT Classification	Not applicable.	Not applicable.	Not a DOT controlled material (United States).	Not applicable.	
TDG Classification	Not applicable.	Not applicable.	Not a TDG controlled material.	Not applicable.	
ADR/RID Class	Not available.	Not available.	Not available.		
IMDG Class	Not available.	Not available.	Not available.		
IATA-DGR Class	Not available.	Not available.	Not available.		

Section 15. Regulatory Information

HCS Classification : Not controlled under the HCS (United States).

U.S. Federal Regulations : TSCA 8(b) inventory: Water 7732-18-5; Magnesium chloride 7786-30-3 (as anhydrous).
Not listed under SARA 302, 304, 311, 312 or 313.

Not listed under CWA.

Not listed under CAA.

Not listed under CERCLA.

State Regulations : No products were found under New Jersey, New York and Pennsylvania RTK.
California Prop. 65: No ingredient was found.

Canadian Regulations : Not controlled under WHMIS (Canada).

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16. Other Information

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	G

National Fire Protection Association (U.S.A.)



References : Not available.

Other Special Considerations : Not available.

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Prepared by : Dell Tech Laboratories Ltd. (519) 858-5021

Notice to Reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.