

Offer Sheet

Product	Magnesium Chloride Flake
Quantity	113 x 1 mt supersacks
Net weight	~249,052 lbs.
Manufacture date	
Availability	One time
Location	Charleston, NC
Date	5/5/26
COA & SDS	Attached below



Brian Svrusis
Solvent Systems International
575 Bennett Road
Elk Grove Village, IL 60007
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Click here for: [Surplus Inventory](#)
Solvent-Systems.com

Magnesium chloride is a **highly soluble, hygroscopic salt**. Its value comes from its ability to **retain moisture, form brines, and supply magnesium ions** at low cost.

1) Deicing and anti-icing (largest volume use)

- Applied to:
 - Roads, bridges, parking lots
- Used as:
 - Pre-wet agent for rock salt
 - Standalone deicer
 - Liquid anti-icing brine

Why it's used:

- Works at lower temperatures than sodium chloride
 - Dissolves quickly (fast ice melt)
 - Reduces salt bounce/scatter
-

2) Dust control and soil stabilization

- Applied on:
 - Unpaved roads
 - Construction sites
 - Mining operations

Function:

- Hygroscopic → pulls moisture from air
 - Keeps fines damp → reduces airborne dust
-

3) Oil and gas drilling fluids

- Used to prepare **clear brine systems**

Applications:

- Drilling fluids
- Completion fluids

Role:

- Provides density control
 - Stabilizes formations
 - Compatible with other brine chemistries
-

4) Construction and specialty cements

- Component in **magnesium oxychloride cement (MOC)**

Applications:

- Industrial flooring
- Rapid-set repair materials

Note:

- Not typically used in reinforced concrete due to chloride corrosion risk
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5) Water and wastewater treatment

- Used as:
 - Coagulant aid
 - Nutrient source for biological treatment

Benefits:

- Improves floc formation
 - Supports microbial activity in some systems
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6) Chemical processing and magnesium source

- Feedstock for:
 - Magnesium compounds
 - Magnesium metal (via brines)

Other uses:

- pH adjustment in certain processes
 - Intermediate in specialty chemical production
-

7) Agriculture (secondary use)

- Source of **magnesium nutrient**

Applications:

- Foliar sprays
- Specialty fertilizers
- Hydroponics

Limitation:

- Chloride content restricts use on chloride-sensitive crops

WEIFANG HONGYUAN CHEMICAL CO., LTD

Add: XINXING INDUSTRIAL PARK,DAJIAWA SUB-DISTRICT OFFICE,COASTAL ECONOMIC DEVELOPMENT ZONE,WEIFANG CITY,CHINA

Certificate Of Analysis

Item Description: Magnesium Chloride

Batch No.:HY0205

Date of Inspection:5-FEB-2025

Date of production:5-FEB-2025

Expiry Date: 4-FEB-2027

Items	MgCl2	Specifications	Results
Characteristics	Appearance	White flake	White flake
	Solubility	Easily Soluble	Easily Soluble
	Toxicity	Non-toxic	Non-toxic
Identification		solution color: colorless	colorless
MgCl2		44.5%	46.5%
Ca2+		-	0.3%
Alkali Chloride		0.15%max	0.14%
Sulfate(SO ₄ ²⁻)%		2.8%max	0.29%
Water insoluble%		0.1%max	0.04%
PH		6.5-9	7
Ammonia		Does not contain Ammonia	



SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

MAGNESIUM CHLORIDE

1. Chemical Product & Company Information

Synonyms: Magnesium Chloride Hexahydrate; Magnesium Chloride, 6-hydrate

CAS No.: 7791-18-6 (Hexahydrate)

Chemical Formula: MgCl₂·6H₂O

Product Use: Dust control; Snow and ice melt; agriculture, aquaculture, feed additive, manufacture of textile, cement, paper, etc.

Manufacturer: Weifang Hongyuan Chemical Co., Ltd

Address: Xinxing Industrial Park, Dajiawa Sub-District Office, Coastal Economic Development Zone, Weifang City, China

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Date: A U G 22, 2022

2. Composition/Information on Ingredients

Ingredient	CAS No.	Percent
Magnesium Chloride Hexahydrate(MgCl ₂ ·6H ₂ O)	7791-18-6	46%
Other Chlorides (as NaCl)	7647-14-5	53%
Water Insoluble substance	7732-18-5	1%

3. Hazards Identification

Emergency Overview

CAUTION! MAY BE HARMFUL IF SWALLOWED.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 1 - Slight

Lab Protective Equip: Goggles; Lab Coat; Proper Gloves, Dust Mast

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation: Inhalation of dust may cause mild irritation to the mucous membranes.

Ingestion: Since magnesium salts are slowly absorbed, abdominal pain, vomiting and diarrhea

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may be the only symptoms. However, if elimination is blocked by bowel blockage or other reasons, CNS depression, lack of reflexes, hypocalcemia (deficiency of calcium in the blood) may occur.

Skin Contact:

No adverse effects expected but may cause minor skin irritation.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact: Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact: Wash thoroughly with running water. Get medical advice if irritation develops.

Note to Physician:

IV administration of calcium gluconate will partially reverse the effects of acute magnesium toxicity. Ventricular support with calcium chloride infusion and mannitol forced diuresis has also been successful.

5. Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard. At room temperature the addition of magnesium chloride to furan-2-peroxycarboxylic acid, will cause the acid to explode.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

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Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: white Pellet

Odor: Odorless.

Solubility: soluble in water% Volatiles by volume @ 21°C(70F): 0

Boiling Point: Not applicable(loses water of hydration)

Melting Point: 116.4°C - 116.8°C

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. By strong ignition is converted into oxychloride.

Hazardous Decomposition Products:

When heated to decomposition it emits corrosive hydrochloric acid vapor. When heated to

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temperatures above 300°C (572F) it emits toxic fumes of chlorine gas.

Hazardous Polymerization: Will not occur.

Incompatibilities: Furan-2-peroxycarboxylic acid. Strong oxidizing agents will release chlorine.

Conditions to Avoid: Heat, moisture, incompatibles.

11. Toxicological information

Oral rat LD₅₀:8100mg/kg; Investigated as a mutagen. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, OSHA, ACGIH or IARC.

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID

ADR/RID class: None

Maritime transport IMDG:

IMDG / IMO: NOT REGULATED, it is not dangerous cargo

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications.

15. Regulatory Information

National regulations: All components of this product are not listed in the Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

U.N.No.: None Allocated

Dg Class: None Allocated

Sub Risk: None Allocated

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Hazchem: None Allocated

Poison Schedule: None allocated.

16. Other Information

Date: October 22, 2020

Reference: Not available

Other special considerations: Not available

Other information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.

End of safety data sheet