

SAFETY DATA SHEET – Magnesium Chloride Brine

Date Issued: February 19, 2024	Version: 1.0	Revision Issued:
--------------------------------	--------------	------------------

Section I – Product and Company Identification

	INTREPID POTASH – NEW MEXICO, LLC 1001 17 th St. Suite 1050 Denver, CO 80202 Office 303-296-3006 Fax 303-298-7502 Web http://www.intrepidpotash.com/Contact.aspx EMERGENCIES: Call CHEMTREC North America: (800) 424-9300 Outside USA: +1 (703) 527-3887
--	--

Common Names: Magnesium Chloride Brine	Formula: NaCl·MgCl ₂ · KCl H ₂ O	Synonym: 10.5 lb Magnum Brine	Use: Industrial
--	--	-------------------------------	-----------------

Section II – Hazard Identification

GHS-US Classification	Code: H320	Category 2B
GHS-US Labeling:		
Signal Word:	Warning	
Hazard Statement:	H320: Causes Eye Irritation	
Precautionary Statements	P264: Wash hands thoroughly after handling P305+P351+P338: If in eyes rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists get medical advice/attention	

Section III – Composition/Information on Ingredients

Chemical Name(s)	CAS No.	Exposure Limits								% by Weight
		OSHA PEL		TLV - TWA		STEL		CEIL		
		mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
Water	7732-18-5									60.5 – 82.5
Magnesium Chloride	7786-30-3									12.0 - 25.0
Sodium Chloride	7647-14-5	15 / 5*		10**						4.0 - 8.0
Potassium Chloride	7447-40-07	15 / 5*		10**						1.5 – 6.5

** Total Dust / Respirable dust * Based on ACGIH nuisance dust limits

Section IV – First Aid Measures

Eyes:	Rinse cautiously with water for several minutes. Flush with water, including under upper & lower lids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention/advice if pain and irritation persists.
Skin:	Wash thoroughly with water. Obtain medical advice/attention if irritation persists.
Ingestion:	A large bodily load may cause vomiting, diarrhea, cramps, tingling in hands and feet, weak pulse, and circulatory disturbances. Administer water to the patient. Ingesting will usually cause purging of the stomach by vomiting. Get medical attention.

Inhalation:

If individual is experiencing respiratory discomfort or irritation remove to fresh air. If discomfort or irritation persists, get medical attention/advice.

Section V – Fire Fighting Measures

Flash Point: None Auto-ignition Temperature: Not Applicable Lower Explosive Limit: Not Applicable
Upper Explosive Limit: Not Applicable

Extinguishing Media: As required for surrounding fire. Brine is non-flammable and does not support combustion.

Special Firefighting Procedures and Equipment:

Full structural firefighting (bunker) gear for a surrounding fire as for any fire - no special gear or procedures necessary. Discharge to sewer system(s) or environment may be restricted, requiring containment and proper disposal of water.

Section VI – Accidental Release Measures

Small Spill: If on a hard surface, absorb with spill control materials and dispose of soaked materials appropriately. If on soil, remove and collect any soil dampened by the spill.

Large Spill: Collect with appropriate equipment. If on a hard surface, absorb with spill control materials and dispose of soaked materials appropriately. If on soil, remove and collect any soil dampened by the spill.

Release Notes: Spilled Brine can be quickly diluted below the toxic level shown in Section XI by relatively large amounts of water. Prevent spilled materials from entering sewers, storm drains and other unauthorized treatment drainage systems. If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number, 800-424-8802. In case of accident or road spill notify: CHEMTREC IN USA AT 800-424-9300; CANUTEC in Canada at 613-996-6666 CHEMTREC in other countries at (International code) +1-703-527-3887.

Comments: See Section XIII for disposal information and Section XV for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Section VII – Handling and Storage

Ventilation: Optional

Handling: Avoid prolonged contact to skin where possible. Clean spillage on floors and walkways immediately to prevent injuries.

Storage: Avoid contact with aluminum or carbon steel to minimize corrosion.

Section VIII – Exposure Controls/Personal Protection

Engineering Controls: May be necessary to minimize contact exposure.

Personal Protection:

Eye Protection: Use tight-fitting safety goggles.

Protective Clothing: Gloves, long sleeve shirts and long pants. Launder work clothing regularly

Respiratory Protection: Optional

Other Protective Clothing or Equipment: Optional

Section IX – Physical and Chemical Properties

Appearance/Color/Odor: Clear to amber colored liquid

Melting Point/Range: Not Applicable

Boiling Point: Not Applicable

Solubility in Water: Not Applicable

Boiling Point/Range: Not Applicable

Specific Gravity: 1.25 – 1.32

Vapor Pressure (mmHg): Not Applicable

Vapor Density: Not Applicable

% Volatiles: No Data Available

Bulk Density: 74-77 lbs/ft³ (1185-1230 kg/m³)

Evaporation Rate: No Data Available

pH: 7 to 8

Viscosity: No Data Available

Section X – Stability and Reactivity

Stability:	Stable.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	May be corrosive to metals.
Materials to Avoid (Incompatibilities):	Incompatible with strong acids, caustics, ammonia, and cyanides.
Hazardous Decomposition Products:	Under normal applications and conditions decomposition should not occur. Slow heating may release free chlorine gas above 320°F/160°C. Avoid contact with strong acids, as chlorine gas may evolve.

Section XI Toxicological Information

Significant Routes of Exposure:	Eyes, skin, inhalation, ingestion
Substance:	Magnesium Chloride, Sodium Chloride
Acute Oral Toxicity:	Rat, oral, LD50 >3000 mg/kg Mouse, oral, LD50 > 4000 mg/kg
Acute Inhalation Toxicity:	Rat, LC50 > 42 g/m ³ /1hour
Acute Dermal Toxicity:	No data available
Eye & Skin Irritation:	Rabbit, Eye: 100 mg/24 hour, moderate irritant Rabbit, Eye: 500 mg/ 24 hour, mild irritant
Substance:	Magnesium Chloride, Sodium Chloride
Acute Oral Toxicity:	No data available
Acute Inhalation Toxicity:	No data available
Acute Dermal Toxicity:	No data available
Eye & Skin Irritation:	No data available

Section XII – Ecological Information

Ecotoxicology:	Acute Toxicity to Fish:	When dissolved in water, Magnesium Chloride/Sodium Chloride creates an elevated level of salinity that may be harmful to fresh water aquatic species and to plants that are not salt-tolerant.
	Chronic Toxicity to Fish:	No data available
	Acute Toxicity to Aquatic Invertebrates:	No data available
	Chronic Toxicity to Aquatic Invertebrates:	No data available
	Toxicity to Aquatic Plants:	No data available
	Toxicity to Bacteria: (activated sludge):	No data available
	Toxicity to Soil Dwelling Organisms:	No data available
Environmental Fate:	Toxicity to Terrestrial Plants:	No data available
	Stability in Water:	When dissolved in water, Magnesium Chloride creates an elevated level of salinity that maybe harmful to fresh water aquatic species and to plants that are not salt-tolerant.
	Stability in Soil:	No data available
Toxicity:	Non-toxic	
Degradation	Chloride, Potassium and Magnesium Ions	

Section XIII – Disposal Considerations

Product Disposal:	This material, if discarded as produced, is not a RCRA “listed” or “characteristic” hazardous waste. Contamination may subject it to hazardous waste regulations. Properly characterize all waste materials. Consult State and local regulations regarding the proper disposal of this material.
General Comments:	This material should not be disposed of in a location where run-off will escape.

Section XIV – Transportation Information

Proper Shipping Name:	Not Applicable
Hazard Class:	Not Applicable
Identification Number:	Not Applicable
Packing Group (Technical Name)	Not Applicable

Section XV – Regulatory Information

UNITED STATES:

SARA Hazard Category: This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire: No **Pressure Generating:** No **Reactivity:** No **Acute:** No **Chronic:** No

SARA Title III Information: This product contains the following substances subject to the reporting requirements of Title III(EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Chemical	CAS No.	Percent by Weight	CERCLA RQ (lbs.)
Water	7732-18-5	60.5 – 82.5	N/A
Magnesium Chloride	7786-30-3	12.0 - 25.0	N/A
Sodium Chloride	7647-14-5	4.0 - 8.0	N/A
Potassium Chloride	7447-40-07	1.5 – 6.5	N/A

TSCA:	Sodium Chloride and Potassium Chloride are listed in the TSCA Inventory.
CANADA:	DSL: Yes NSDL: Not Listed
WHMIS Hazard Symbol and Classification:	Not controlled
Ingredient Disclosure List:	This product does not contain ingredient(s) on this list

Environmental Protection:	All intentional ingredients are listed on the DSL (Domestic Substance List).
----------------------------------	--

Section XVI – Other Information				
NFPA Hazard Rating:	Health: <u>1</u>	Flammability: <u>0</u>	Instability: <u>0</u>	Special Hazard: <u>N/A</u>
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme				
HMIS Hazard Rating:	Health: 1	Flammability: 0	Physical Hazard: 0	PP: B
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme				
B = safety glasses and gloves				
Comments:	None			

Section(s) changed since last revision: None - Initial version

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief as of the revision date noted below. This information is not a warranty or quality specification. The user of the product is solely responsible for determining the suitability of use in each particular situation. This information relates only to the specific material designated and may not be valid for the material used in combination with any other materials or in any process. The user of the product assumes all risks and responsibilities in connection with the use of the product, and Intrepid will not be responsible for any damages relating to the use of the product.

(Revision Date 2/24)