



1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	Enhanced Salt Brine
Chemical Family	Alkali Metal/Halide
Chemical Name	Calcium Chloride /Sodium Chloride / Magnesium Chloride
Formula	CaCl ₂ , NaCl, MgCl ₂
Molecular Weight	N/A
Commercial Name	Calcium Chloride Enhanced Brine
Manufacturer	Emergency Telephone Numbers
Cargill Salt	CHEMTREC (800) 424-9300
P.O. Box 5621	
Minneapolis, MN 55440	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Description

Clear to cloudy liquid

Ingredient Name	CAS Number	Concentration (%)
Calcium Chloride	10043-52-4	8.5% or higher
Sodium Chloride	7647-14-5	10% or higher
Magnesium Chloride	7791-18-6	1.5% or higher
Calcium Sulfate Dihydrate	13397-24-5	0.5-2%
Total Chloride Salts		25% or higher
Water		74% or lower

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Potential Health Effects

Route(s) Of Entry: Ingestion, skin/eye contact, inhalation.

Human Effects and Symptoms of Overexposure:

Acute Inhalation: Irritation of the respiratory tract.

Chronic Inhalation: No applicable information found for chronic system effects.

Acute Skin Contact: Large amounts can cause irritation, and, if applied to damaged skin, absorption can occur with effects similar to those via ingestion.

Chronic Skin Contact: No applicable information found for chronic system effects.

Acute Eye Contact: Irritation with burning and tearing (salt concentrations greater than the normal saline present).

Chronic Eye Contact: No applicable information found for chronic systemic effects.

Acute Ingestion: Intake of large amounts has generally occurred for deliberate reasons: suicide, absorption, and to induce vomiting. The following effects were observed; nausea and vomiting, diarrhea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, sunken eyes, high blood pressure, muscle weakness, dry mouth and nose, shock, cerebral edema (fluid on brain), pulmonary edema (fluid in lungs), blood cell shrinkage, and brain damage (due to dehydration of brain cells). Death is generally due to cardiovascular collapse or CNS damage. Less than a few grams would not be harmful. For larger quantities, drink large amounts of water or milk.

Chronic Ingestion: No applicable information found for chronic systemic effects.

Carcinogenicity

NTP: Not listed as carcinogen or mutagen.

IARC: Not listed as carcinogen or mutagen.

OSHA: Not listed as carcinogen or mutagen.

Medical Conditions Aggravated by Exposure: In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

HMIS Health: 1, **Flammability:** 0, **Reactivity:** 0, **Protective Equipment:** A

4. FIRST AID MEASURES

First Aid for Eyes: For eye contact, flush with water immediately, lifting eyelids occasionally.

First Aid for Skin: Remove clothing from affected area. Wash skin thoroughly. Rinse carefully.

First Aid for Inhalation: If person breathes large quantities, remove to fresh air at once. If breathing stops, apply artificial respiration immediately.

First Aid for Ingestion: Less than a few grams would not be harmful. For larger quantities, drink large amounts of water or milk.

5. FIRE AND MEASURES

Flash Point: N/A

Extinguishing Media: N/A. This product is nonflammable.

Special Fire Fighting Procedures: N/A

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Contain spills to prevent contamination of water supply or sanitary sewer system. Vacuum or sweep into containers for proper disposal.

7. HANDLING AND STORAGE

Storage Temperature (min./max.): Ambient. Salt may re-crystallize at low temperatures.

Special Sensitivity: Avoid contact with strong acids.

Handling and Storage Precautions: None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection Requirements: Eyeglasses or goggles should be worn.

Skin Protection Requirements: Protective clothing may be worn, but is generally not required.

Respiratory/Ventilation Requirements: None

Exposure Limits: Not listed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid with slight halogen odor.

Color: Cloudy to clear.

Odor: Halogen odor when heated.

Boiling Point (760mm Hg)(°C): 1935 (CaCl₂) 1465 (NaCl)

Melting Point/Freezing Point (°C): 782 (CaCl₂) 801 (NaCl)

pH: 5.5 – 7.0

Solubility in Water (g/cc)(%): N/A

Specific Gravity (H₂O = 1): 1.25

Bulk Density (lbs./ft³): N/A

% Volatile by Weight: N/A

10. REACTIVITY

Stability: Stable

Incompatibilities: Avoid contact with strong acids. Corrosive to some metals.

Decomposition Products: May evolve chlorine gas when in contact with strong acids.

11. TOXICOLOGICAL INFORMATION

Description: Not listed.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not listed.

Environmental Degradation: Not listed.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow applicable Federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

D.O.T. Shipping Name: Not listed.

Technical Shipping Name: Not listed.

D.O.T. Hazard Class: Not listed.

U.N./N.A. Number: Not listed.

Product Rq (lbs.): N/A

D.O.T. Label: Not listed.

D.O.T. Placard: N/A

Freight Class Bulk: N/A

Freight Class Package: N/A

Product Label: N/A

15. REGULATORY INFORMATION

OSHA Status: Not listed.

TSCA Status: Components listed as non-hazardous.

CERCLA Reportable Quantity SARA Title III

Section 302 Extremely Hazardous Substances: Not listed.

Section 311/312 Hazard Categories: Not listed.

Section 313 Toxic Chemicals: Not listed.

RCRA Status: Not listed.

HMIS Rating: 1 0 0 A

State Regulatory Information

Company Name/Cas Number	Concentration	State Code
N/A		

16. OTHER INFORMATION

Reason for Issue: New Product
Prepared By: Steve Karl
Approved By: Sarah Hubert
Title: Technical Director
Approval Date: October 2011
Supersedes Date:
MSDS Number: NC27

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