# **Material Safety Data Sheet**

Proprietary

# CARGIL SALT

#### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Product Name:Magnesium Chloride LiquidChemical Product Code:100, 200, 300, 600, 700Chemical Family:Alkaline Earth Metals

Chemical Name: Aqueous Magnesium Chloride, magnesium sulfate

**Formula:** MgCl 2, MgSO 4 **Molecular Weight:** 95.22, 120.37

Manufacturer Emergency Telephone Numbers

Cargil Incorporated – Solarchem (510)790-8604

Resources P.O. Box 364

Newark, Ca. 94560-0364

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Description

Aqueous magnesium chloride and magnesium sulfate and a proprietary ingredient.

**Ingredient Name** 

CAS Number Exposure Limits Concentration (%)

Magnesium Chloride / #7786-30-3 Magnesium Sulfate / #7487-88-9

# 3. HAZARDS INDENTIFICATION

#### **EMERGENCY OVERVIEW**

None

**Potential Health Effects** 

Route(s) Of Entry: Inhalation, Skin, Ingestion

**Human Effects and Symptoms of Overexposure:** Ingestion of large amounts can cause gastrointestinal upset and irritation of the stomach. No applicable information found for chronic systemic effects.

**Acute Inhalation:** Mist may cause mild irritation of nose and throat; unlikely entry route.

**Chronic Inhalation:** Not Listed

**Acute Skin Contact:** May cause minor irritation to sensitive persons.

Cronic Skin Contact: Not Listed

**Acute Eye Contact:** For eye contact, flush eyes with large amounts of water, lifting eyelids

occasionally.

**Chronic Eye Contact:** Not Listed

**Acute Ingestion:** May cause nausea or vomiting.

**Chronic Ingestion:** Not Listed

Carcinogenicity

NTP: Not listed as a carcinogen or mutagen.

IARC: Not listed as a carcinogen or mutagen

OSHA: Not listed as a carcinogen or mutagen

**Medical Conditions Aggravated by Exposure:** Possible skin irritation to sensitive persons.

#### 4. FIRST AID MEASURES

**First Aid For Eyes:** For eye contact, flush with large amounts of water, lifting eyelids occasionally.

First Aid For Skin: Flush with Water

First Aid For Inhalation: Remove to fresh air. Inhalaation is an unlikely entry route.

**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: Not Applicable

**Extinguishing Media:** Not Applicable

**Special Fire Fighting Proceddures:** May use a self-contained breathing apparatus if temperatures exceed 300 degrees F. (149 degrees C.).

#### 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Contain spill to prevent contamination of water supply or sanitary sewer system. Dispose of according to local requirements.

## 7. HANDLING AND STORAGE

**Storage Temperature (min./max.):** Temperatures below 30 degrees F. (-1 degree C.) can result in the formation of magnesium sulfate crystals.

**Special Sensitivity:** Incompatible with sulfuric and nitric acids, caustics, ammonia, and cyanides.

**Handling and Storage Precautions:** Can be corrosive to some metals, especially steel and aluminum. Do not apply directly to plant foliage or root zones, as concentrated magnesium chloride solutions may cause partial or complete defoliation. Application of magnesium chloride onto paved surfaces may result in slippery conditions which present a safety hazard for food and vehicular traffic.

#### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Eye Protection Requirements:** Wear protective eyeglasses or chemical safety goggles, per OSHA guidelines.

**Skin Protection Requirements:** Normal work gloves are adequate. Protective clothing may be worn, but generally not required. Warm water showering and hand washing is suggested if in direct contact with product, but generally not required.

Respiratory / Ventilation Requirements: N/A

**Exposure Limits:** Not Listed

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Slightly viscous liquid.

Color: Brown / amber liquid

Odor: Slight saline odor.

**Boiling Point (760mm Hg) (\*C):** (760 mm Hg) (\*C) = 108 - 123\*

Melt Point / Freeze Point (\*C): (\*C) = N/A

PH:

Solublility in water (g/cc, %): (g/cc, %) = 100%

**Specific Gravity (H20 = 1):** (H20 = 1) = 1.306

**Bulk Density:** Vapor Density = N/A

% Volatile By Weight:

Vapor Pressure (mm Hg/30 $^{\circ}$ C): = 7.5

Vapor Density (Air = 1): (Air = 1) = N/A

#### 10. REACTIVITY

**Stability:** Stable. Avoid contact with strong acids.

**Incompatibilities:** Materials to avoid: Metals will experience slight corrosion over time. Incompatible with sulfuric and nitric acids, caustics, ammonia, and cyanides. A hazardous reaction involving magnesium chloride and 2-furan percarboxylic acid has been reported.

**Decomposition Products:** May evolve chlorine gas when in contact with strong acids or upon heating about 300 degrees F. (149 degrees C.). Under normal applications, decomposition should not occur.

# 11. TOXICOLOGICAL INFORMATION

**Description:** Not Listed

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Do not apply directly to plant foliage or root zones, as concentrated magnesium chloride solutions may cause partial or complete defoliation.

**Environmental Degradation:** Not Applicable

#### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** For disposal of this material as a waste, act in accordance with all applicable Federal, State and Local waste management regulations.

# 14. TRANSPORTATION INFORMATION

D.O.T. Shipping Name: N/A

**Technical Shipping Name:** N/A

**D.O.T. Hazard Class:** N/A

U.N. / N.A. Number: N/A

**Product Rq. (lbs.):** N/A

**D.O.T. Label:** N/A

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:** N/A

TSCA Status: N/A

Cercla reportable Quantity

**SARA Title III** 

Section 302 Extremely Hazardous Substances: N/A

**Section 311 / 312** 

Hazard categories: N/A

**Section 313** 

Toxic Chemicals: N/A

RCRA Status: N/A

#### **State Regulatory Information**

**Component Name** 

/ CAS Number Concentration State-Code

Magnesium Sulfate 7487-88-9

# 16. OTHER INFORMATION

Reason For Issue: Regulatory Information

Prepared by: Ellen Bragg

Approved by: Skip Niman

Title: Director-Quality Administration

**Approval Date: September 1995** 

**Supersedes Date:** 3/14/94

MSDS Number: M1

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