



## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Chemical Product Name</b>	Magnesium Chloride, Magnesium Sulfate
<b>Chemical Family</b>	Alkali Metal/Halide
<b>Chemical Name</b>	Aqueous Magnesium Chloride and Magnesium Sulfate
<b>Formula</b>	MgCl <sub>2</sub>
<b>Molecular Weight</b>	95.22
<b>Commercial Name</b>	Dust-Off® Dust Suppressant

**Manufacturer**  
Cargill Salt  
P. O. Box 364  
Newark, CA 94560.0364

**Emergency Telephone Numbers**  
CHEMTREC (800) 424-9300

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Description**  
Clear liquid.

<b>Ingredient Name</b>	<b>Exposure Limits</b>	<b>Concentration (%)</b>
<b>CAS Number</b>		
Magnesium Chloride 7786-30-3		29 - 33
Magnesium Sulfate 7487-88-9		1.0 - 3.8
Water		63 - 70

### 3. HAZARDS IDENTIFICATION

#### 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 slight irritation of nose; unlikely entry route.

**Chronic Inhalation:** Not Applicable

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

**Chronic Skin Contact:** Not Applicable

**Acute Eye Contact:** Irritation; inflammation.

**Chronic Eye Contact:** Not Applicable

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

**Chronic Ingestion:** Not Applicable

**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 eyes with large amounts of water, lifting eyelids occasionally.

**First Aid For Skin:** Flush with water.

**First Aid For Inhalation:** Remove to fresh air. Inhalation 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. This product is nonflammable.

**Special Fire Fighting Procedures:** 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 spills to prevent contamination of water supply or sanitary sewer system. Dispose of according to local requirements.

#### **7. HANDLING AND STORAGE**

**Storage Temperature (min./max.):**

**Special Sensitivity:** Do not apply directly to plant foliage or root zones, as concentrated magnesium chloride solutions may cause partial or complete defoliation. This product is designed to control dust on unpaved surfaces. Application of excessive amounts of Dust-Off directly adjacent to or directly upon paved surfaces may result in slippery conditions which present a safety hazard for foot and vehicular traffic.

**Handling and Storage Precautions:** Prolonged storage or subjecting the materials to temperatures below 30 degrees F. (-1 degree C.) can result in the formation of magnesium sulfate crystals. May evolve chlorine gas when in contact with strong acids or upon heating above 300 degrees F (149 degrees C.) Under normal applications, decomposition should not occur. Incompatible with sulfuric and nitric acids, caustics, ammonia and cyanides. A hazardous reaction involving magnesium chloride and 2-furan percarboxylic acid has been reported.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eye Protection Requirements:** Eyeglasses or goggles may be worn.

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

**Respiratory/Ventilation Requirements:** Not Necessary

**Exposure Limits:** Not Applicable

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** Slightly viscous, brown/amber liquid with a slight saline odor.

**Color:** Brown/amber liquid

**Odor:** Slight saline odor.

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

**Melt Point/Freeze Point (°C):** N/A

**PH:** 5.5 – 6.5

**Solubility In Water (g/cc, %):** 100%

**Specific Gravity (H<sub>2</sub>O=1):** 1.306

**Bulk Density:**

**% Volatile By Weight:**

**Vapor Pressure (mm Hg/30°C):** 7.5

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

## 10. REACTIVITY

**Stability:** Stable

**Incompatibilities:** Avoid contact with strong acids. 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 above 300 degrees F. (149 degrees C.). Under normal applications, decomposition should not occur.

## 11. TOXICOLOGICAL INFORMATION

**Description:** Not Listed

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not Listed

**Environmental Degradation:** Not Listed

### 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:** Not Listed

**Technical Shipping Name:** Not Listed

**D.O.T Hazard Class:** Not Listed

**U.N./N.A. Number:** Not Listed

**Product Rq (lbs.):** Not Listed

**D.O.T. Label:** Not Listed

**D.O.T. Placard:** Not Listed

**Freight Class Bulk:** Not Listed

**Freight Class Package:** Not Listed

**Product Label:** N/A

### 15. REGULATORY INFORMATION

**OSHA Status:** Not Listed

**TSCA Status:** Not Listed

**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

#### State Regulatory Information

**Component Name**

**/CAS Number**

**Concentration**

**State-Code**

### 16. OTHER INFORMATION

**Reason For Issue:** Regulatory Communication

**Prepared By:** Steve Karl

**Approved By:** Sarah Hubert

**Title:** Director-Quality Administration  
**Approval Date:** June 2010  
**Supersedes Date:** May 2007  
**MSDS Number:** ND11

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