

## Material Safety Data Sheet

Revision Issued: 1/22/2010      Supercedes: 1/12/2005      First Issued: 4/10/87

### Section I - Chemical Product And Company Identification

**Product Name: Magnesium Chloride Flake**

CAS Number: 7786-30-3

HBCC MSDS No. CM04000



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### Section II - Composition/Information On Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>
Magnesium Chloride	7786-30-3
Non-Hazardous Material	N/A

See Section VIII for Exposure Guidelines

### Section III - Hazard Identification

#### **Routes of Exposure:**

**Ingestion:** Possible nausea and vomiting. Since magnesium salts are slowly absorbed, abdominal pain, vomiting and diarrhea 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.

**Inhalation:** Dust may irritate, but not likely to cause injury.

**Skin:** May cause minor irritation.

**Eyes:** Slight irritation and may cause minor transient corneal injury.

**Summary of Chronic Health Hazards:** May cause kidney damage.

**Signs and Symptoms of Exposure:** N/A

**Effects of Overexposure:** Upset stomach, possibly of nausea and vomiting.

**Medical Conditions Generally Aggravated by Exposure:** N/A

### Section IV - First Aid Measures

**Ingestion:** Low toxicity. Give several glasses of water to drink to dilute. Do not induce vomiting. GET MEDICAL ATTENTION.

**Inhalation:** Remove to fresh air. If breathing has stopped, provide artificial resuscitation. If breathing is difficult, provide oxygen. GET MEDICAL ATTENTION IMMEDIATELY.

**Skin:** Wash off in flowing water or shower for at least 15 minutes. Remove any contaminated clothing.

**Eyes:** Irrigate with large amounts of water continuously for 15 minutes. GET MEDICAL ATTENTION.

## Section V - Fire Fighting Measures

**Flash Point:** None

**Autoignition Temperature:** N/A

**Lower Explosive Limit:** N/A

**Upper Explosive Limit:** N/A

**Unusual Fire and Explosion Hazards:** At room temperature the addition of magnesium chloride to furan-2-peroxycarboxylic acid, will cause the acid to explode.

**Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

**Special Firefighting Procedures:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions.

## Section VI - Accidental Release Measures

No special precautions. Sweep up and return to container. Vacuuming or wet sweeping may be used to avoid dust dispersal.

## Section VII - Handling and Storage

Practice reasonable care and caution. Avoid breathing dust if generated. Material is deliquescent, so may cake with long term storage.

## Section VIII - Exposure Controls/Personal Protection

**Respiratory Protection:** An approved dust respirator is recommended.

**Ventilation:** Provide adequate ventilation.

**Protective Clothing:** N/A

**Eye Protection:** Safety glasses

**Other Protective Clothing or Equipment:** N/A

**Work/Hygienic Practices:** Wash hands thoroughly after handling, and before eating, drinking, or smoking. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.

**Exposure Guidelines:** Exposure Limits in Air:

Magnesium Chloride (CAS#: 7786-30-3) 97%, ACGIH TLV: N/A; OSHA PEL: N/A, STEL: N/A

Non-Hazardous Materials (CAS#: N/A) 3%, ACGIH TLV: N/A; OSHA PEL: N/A; STEL N/A

## Section IX - Physical and Chemical Properties

**Physical State:** Solid

**pH:** N/A

**Melting Point/Range:**

235°F

**Boiling Point/Range:** N/A

**Appearance/Color/Odor:** White, odorless solid flake

**Solubility in Water:** 167g/100 ml

@ 20°C (68°F)

**Vapor Pressure (mmHg):** N/A

**Specific Gravity (Water=1):** 1.56

**Molecular Weight:** 95.21

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

**% Volatiles:** Water of crystallization driven off @ 235°F

**How to detect this compound :**

N/A

## Section X - Stability and Reactivity

**Stability:** Stable under ordinary

**Hazardous Polymerization:** Will not

conditions of use and storage. By strong ignition is converted into oxychloride. occur

**Conditions to Avoid:** Solutions can be aggressively corrosive. Heat, moisture

**Materials to Avoid:** Furan-2-peroxycarboxylic acid. Strong oxidizing agents will release chlorine.

**Hazardous Decomposition Products:** Hydrogen chloride at well over 1400°C. When heated to decomposition it emits corrosive hydrochloric acid vapor. When heated to temperatures above 300°C (572°F) it emits toxic fumes of chlorine gas.

### Section XI - Toxicological Information

Oral - Rat 8100 mg/kg LD50  
Oral - Mouse 7600 mg/kg LD50

### Section XII - Ecological Information

N/A

### Section XIII - Disposal Considerations

Dispose of in accordance with applicable local, county, state and federal regulations.

### Section XIV - Transport Information

**DOT Proper Shipping Name:** N/A  
**DOT Hazard Class/ I.D. No.:** N/A

### Section XV - Regulatory Information

**Reportable Quantity:** N/A  
**NFPA Rating:** Health - 1; Flammability - 0; Instability - 0  
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme  
**Carcinogenicity Lists:** No **NTP:** No **IARC Monograph:** No **OSHA Regulated:** No

### Section XVI - Other Information

**Synonyms/Common Names:** N/A

**Chemical Family/Type:** Magnesium Chloride, Hexahydrate

**Sections changed since last revision:** III, IV, VI, IX

**IMPORTANT!** Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This MSDS has been prepared according to the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The MSDS information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.