



## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Product Name	Sodium Chloride (Salt)
Chemical Family	Alkali Metal/Halide
Chemical Name	Sodium Chloride
Formula	NaCl
Molecular Weight	58.44
Commercial Name	Diamond Crystal® Halite Winter Melt® Deicing Crystals

**Manufacturer**  
 Cargill Incorporated  
 Salt Division  
 P. O. Box 5621  
 Minneapolis, MN 55440

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

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Description**  
 White crystalline solid.

Ingredient Name	Exposure Limits	Concentration (%)
CAS Number Sodium Chloride 7647-14-5		100%

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

None - GHS Substance (Generally Recognized As Safe)

HMS Health: 1, Flammability: 0, Reactivity: 0, Protective Equipment: A

#### 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 systemic 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 systemic 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 (fluid on brain) or 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 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:** In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

#### **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.):** Avoid humid or wet conditions as product will cake and become hard.

**Special Sensitivity:** Avoid contact with strong acids.

**Handling and Storage Precautions:** Becomes hygroscopic at 70% Relative Humidity

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eye Protection Requirements:** Eyeglasses or goggles should be worn in dusty areas.

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

**Respiratory/Ventilation Requirements:** NIOSH/MSHA approved respirator for particulates.

**Exposure Limits:** Not listed.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical Form:** White crystalline solid with slight halogen odor.

**Color:** White crystalline solid

**Odor:** Halogen odor

**Boiling Point (760mm Hg) (°C):** 760 mm Hg, 1465 degrees C.

**Melt Point/Freeze Point (°C):** 801 degrees C.

**PH:** 6.7 - 7.3

**Solubility in Water (g/cc, %):** 26.4%

**Specific Gravity (H<sub>2</sub>O=1):** 2.16 (H<sub>2</sub>O)

**Bulk Density:** 53-83 Lbs/Ft<sup>3</sup>

**% Volatile By Weight:** N/A

**Vapor Pressure (mm Hg/747°C):** = 2.4

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

**10. REACTIVITY**

**Stability:** Stable

**Incompatibilities:** Avoid contact with strong acids. Becomes corrosive to metals when wet.

**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: 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: 100A

**State Regulatory Information**

Component Name

/CAS Number

Concentration

State-Code

N/A

**16. OTHER INFORMATION**

Reason For Issue: Regulatory Compliance

Prepared By: Steve Karl

Approved By: Dave Merriweather

Title: Director Quality Administration

**Approval Date:** May 2007  
**Supersedes Date:** February 2005  
**MSDS Number:** ND2

**Disclaimer:** All statements, technical information and recommendations contained herein are, to the best of our knowledge, reliable and accurate. However, no warranty, either expressed or implied is made with respect thereto, nor will any liability be assumed for damages resultant from the use of the material described.

It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. It is also the responsibility of the user to maintain a safe workplace. The user should consider the health hazards and safety information provided herein as a guide and should take the necessary steps to instruct employees and to develop work practice procedures to ensure a safe work environment.

This information is not intended as a license to operate under, or a recommendation to practice or infringe upon any patent of this Company or others covering any process, composition of matter or use.