



## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Chemical Product Name</b>	Sodium Chloride (Salt)
<b>Chemical Family</b>	Alkali Metal/Halide
<b>Chemical Name</b>	Sodium Chloride
<b>Formula</b>	NaCl
<b>Molecular Weight</b>	58.44
<b>Commercial Name</b>	Diamond Crystal® Winter Melt® Ice Melter

**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.

<b>Ingredient Name</b>	<b>CAS Number</b>	<b>Concentration (%)</b>
Sodium Chloride	7647-14-5	95 - 100%

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**HMIS 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:** 1 0 0 A

**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:** Sarah Hubert

**Title:** Director-Quality Administration

**Approval Date:** August 2010

**Supersedes Date:** February 2009

**MSDS Number:** ND2

**Disclaimer:** All statements, technical information and recommendations contained herein are, 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.

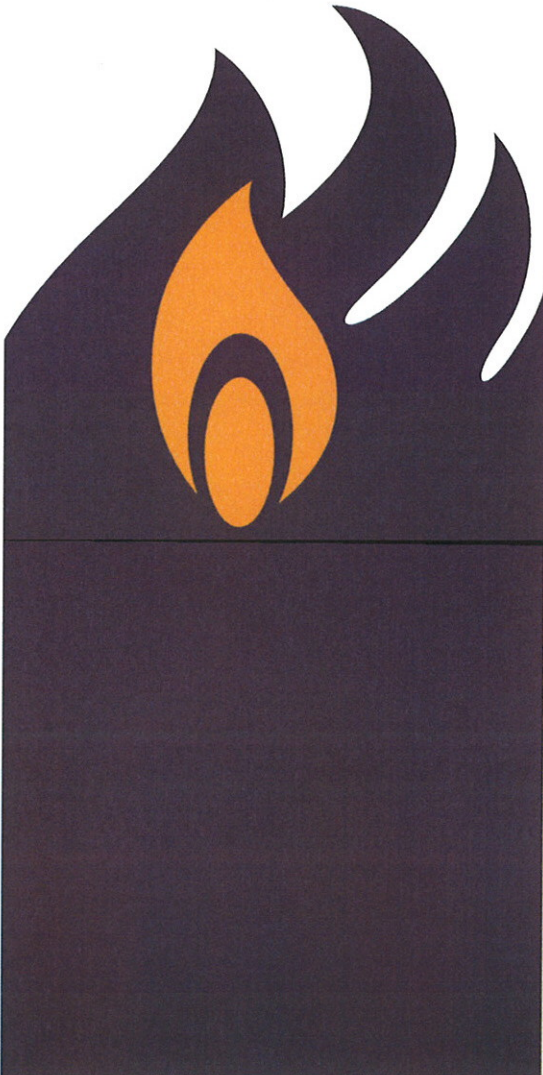
This information is not intended as a license to operate under, or a recommendation to practice or infringe upon any patent of this Company or others covering any process, composition of matter or use.



## Extreme performance ice melter!

EXTREME PERFORMANCE  
**Flash Melt<sup>®</sup>**  
CALCIUM CHLORIDE ICE MELTER

- Works down to: -25°F/- 31°C
- Our fastest melting: contains over 90% Calcium Chloride pellets for the fastest-acting ice melting at low temperatures
- Gives off heat as it dissolves, accelerating ice melting action
- Available in 50 lb. bags



### Directions for Use:

Remove slush and as much loose snow as possible before ice melter application. Spread Flash Melt® evenly across surface area. Apply ¼–½ cup per square yard, depending on ice thickness and air temperature, as needed. Reapply as necessary. When ice and snow soften, remove slush and any excess ice melter from pavement for good concrete maintenance.

### Storage information:

- Flash Melt® ice melter contains calcium chloride, which is hygroscopic, thus easily pulls moisture from the air
- Close and reseal container tightly to keep product dry, or place in a moisture-proof container
- Store in a dry place
- Always store ice melters out of reach of children and pets

### Contains:

90-92%	Calcium Chloride	CAS No. 010043-52-4
4-6%	Water	CAS No. 007732-18-5
2-3%	Potassium Chloride	CAS No. 007447-40-7
1-2%	Sodium Chloride	CAS No. 007647-14-5

### Precautions and Best Practices:

Calcium chloride causes eye irritation and may cause skin irritation, so avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Diamond Crystal® Flash Melt® is not intended for human or animal consumption. If ingested, drink water. If discomfort occurs or persists, contact your doctor or veterinarian.

Diamond Crystal® Flash Melt® may be used to remove snow and ice from concrete sidewalks, parking lots and asphalt surfaces. However, all ice-melting agents work by reducing the freezing point of water. This may result in more frequent freeze-thaw cycling of the melted snow and ice, which can cause surface scaling of concrete. As such, use only on properly placed, cured and sealed, air-entrained concrete. To lessen the possibility of freeze-thaw cycling and potential damage, promptly remove slush as it is formed. DO NOT use on porous or improperly cured concrete, concrete less than one year old, precast concrete items, masonry, mortar, wood or other porous materials. As with any ice-melting agent, particular care should be used when grass and vegetation are adjacent to the deicing surface, as excess application may cause damage. Consumer uses this product at his/her own risk.

For MSDS, stain test results and other information, consult the FAQ section at [www.cargillsalt.com](http://www.cargillsalt.com), or contact us at 1-800-428-4244.

## Diamond Crystal® Flash Melt® Calcium Chloride Ice Melter

Product	Item Number	Pallet Ct.	Pallet Pattern (tiers)	Pallet Dimensions	Product & Pallet Wt.	Package Cube	Package Dimension	Gross Wt.	GTIN individual (UPC)	GTIN pallet
50 lb Poly Bag	8671	56	8 tiers of 7	40x48x42	2850	.75 cu. ft.	20.5 x 11.5 x 5.5	50.5	000-13600-03112-1	100-13600-03112-8

All specifications are approximate. Please contact your broker or Cargill representative for exact specifications.

We welcome your questions and comments. Please call us at 1-888-385-7258 (SALT) or visit us online at [www.cargillsalt.com](http://www.cargillsalt.com).

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