Cargill™

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 Mel, 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: Sodium Chloride
   CAS Number: 7647-14-5

   Exposure Limits: Concentration (%)
   100%

3. HAZARDS IDENTIFICATION

   EMERGENCY OVERVIEW
   None - GRAS Substance (Generally Recognized As Safe)

   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 (H₂O=1)**: 2.16 (H₂O)
   
   **Bulk Density**: 53-83 Lbs/ft³
   
   **% Volatile By Weight**: N/A
   
   **Vapor Pressure (mm Hg/74°F)**: = 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 Req (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: Dave Morinweather
Title: Director—Quality Administration
Approval Date: May 2007
Superseded Date: February 2005
MSDS Number: NO2

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