



## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Chemical Product Name</b>	Sodium Chloride (Salt) Treated with Citric Acid
<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® Red-Out® Brine Blocks

**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**  
Compressed 50-pound white salt blocks

<b>Ingredient Name</b>	<b>Exposure Limits</b>	<b>Concentration (%)</b>
<b>CAS Number</b>		
Sodium Chloride 7647-14-5		99.65
Citric Acid 77-92-9		0.35

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**HMIS Health:** 1, **Flammability:** 0, **Reactivity:** 0, **Protective Equipment:** A

#### Potential Health Effects

**Route(s) Of Entry:** Inhalation, Skin, Ingestion

**Human Effects and Symptoms of Overexposure:** Ingestion of large amounts (greater than 0.1 pound) can cause gastrointestinal upset and irritation of the stomach. No applicable information found for chronic systemic effects.

**Acute Inhalation:** May cause mild irritation of nose and throat.

**Chronic Inhalation:** N/A

**Acute Skin Contact:** Dust may cause mild irritation.

**Chronic Skin Contact:** N/A

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

**Chronic Eye Contact:** N/A

**Acute Ingestion:** Nausea; vomiting.

**Chronic Ingestion:** N/A

**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. (This applies only to salt-sensitive individuals.)

**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:** Not Applicable

**Extinguishing Media:** Not Applicable. This product is nonflammable.

**Special Fire Fighting Procedures:** Not Applicable.

**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 proper disposal.

**7. HANDLING AND STORAGE**

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

**Special Sensitivity:** May evolve chlorine gas when in contact with strong acids.

**Handling and Storage Precautions:** Avoid humid or wet conditions as product will cake and become hard.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

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

**Respiratory/Ventilation Requirements:** NIOSH/MSHA approved respirator for particulates.. Ventilate as required to maintain airborne particulates below occupational exposure limits.

**Exposure Limits:**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** White crystalline solid.

**Color:** White

**Odor:** Slight

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

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

**PH:**

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

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

**Bulk Density:**

**% Volatile By Weight:**

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

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

## 10. REACTIVITY

**Stability:** Stable

**Incompatibilities:** 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:** 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:** N/A

**Technical Shipping Name:** Sodium Chloride

**D.O.T Hazard Class:** N/A

**U.N./N.A. Number:** N/A

**Product Rq (lbs.):**

**D.O.T. Label:** N/A

**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:** 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

**HMIS:** 1 0 0 A

### State Regulatory Information

**Component Name**

**/CAS Number**

**Concentration**

**State-Code**

## 16. OTHER INFORMATION

**Reason For Issue:** Regulatory Communication

**Prepared By:** Steve Karl

**Approved By:** Dave Merriweather

**Title:** Director-Quality Administration

**Approval Date:** May 2007

**Supersedes Date:** February 2005  
**MSDS Number:** ND4

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