

# Material Safety Data Sheet

# 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Product Name Sodium Chloride (Salt) with Trace Minerals

Chemical FamilyAlkali Metal/HalideChemical NameSodium ChlorideFormulaNaCl and Trace Minerals

Molecular Weight 58.44

Commercial Name Champions Choice® Trace Mineral Salt (Loose, Blocks, Bricks and Spools)

Champions Choice® Trace Mineral Salt with EDDI (Loose and Blocks)

ManufacturerEmergency Telephone NumbersCargill SaltCHEMTREC (800) 424-9300

P.O. Box 5621

Minneapolis, MN 55440

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

# **Description**

Reddish-Brown granular solid, compressed 50-pound blocks, 4-pound bricks or 3-ounce spools.

# **Ingredient Name**

CAS Number	<b>Exposure Limits</b>	Concentration (%)	
		TM	TM w/EDDI
Sodium Chloride 7647-14-5		98.236	98.212
Ferrous Carbonate 563-71-3		0.526	0.526
Zinc Oxide 1314-13-2		0.486	0.486
Manganous Oxide 1344-43-0		0.334	0.334
Reddish Brown Iron Oxide 1309-37-1		0.252	0.252
Copper Sulfate 7758-98-7		0.120	0.120
Ethylenediamine Dihydriodide (EDDI) 5700-49-2		0.0	0.035
Mineral Oil 8042-47-5		0.020	0.020
Calcium Iodate 7789-80-2		0.0112	0.0
Cobalt Carbonate 513-79-1		0.0108	0.0108
Artificial Flavor		0.005	0.005

<sup>\*</sup>Premix containing 4% Selenium

# 3. HAZARDS IDENTIFICATION

## **EMERGENCY OVERVIEW**

This colored material is considered a low hazard chemical which does not present usual hazards in the event of a spill or fire.

#### **Potential Health Effects**

Route(s) Of Entry: Ingestion, skin/eye contact, inhalation.

**Human Effects and Symptoms of Overexposure:** Prolonged exposure of the skin or eyes to salt dust may cause irritation. Prolonged ingestion of high does of salt may adversely affect blood pressure.

**Acute Inhalation:** Inhalation of salt dust may be irritating to the respiratory system.

**Chronic Inhalation:** No applicable information found for chronic system 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: Prolonged exposure of the skin to salt dust may cause irritation.

Acute Eye Contact: Irritation with burning and tearing (salt concentrations greater than the normal saline present).

Chronic Eye Contact: Prolonged exposure of the eyes to salt dust may cause irritation.

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 edema (fluid on brain), 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:** Prolonged ingestion of high doses of salt may adversely affect blood pressure.

#### Carcinogenicity

NTP: Not listed as carcinogen or mutagen.

IARC: Not listed as carcinogen or mutagen.

OSHA: Not listed as 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. CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION>

#### 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 in accordance with applicable waste disposal regulations.

## 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 75% 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: Colored crystalline solid.

Color: Greenish brown.

Odor: NA.

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

Melting Point/Freezing Point (°C): 801

**pH:** 6.7 – 10.0

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

Specific Gravity ( $H_2O = 1$ ): 2.16

Bulk Density (lbs./ft<sup>3</sup>): 70-83

% Volatile by Weight: N/A

Vapor Pressure (mm Hg/747°C): 2.4

Vapor Density (Air=1): N/A

## 10. REACTIVITY

Stability: Stable

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

**Decomposition Products:** At high temperatures, decomposition may result in formation of oxides of the trace minerals present in the salt.

## 11. TOXICOLOGICAL INFORMATION

**Description:** Additional toxicological information for components greater than 1 percent in concentration are provided as follows: SODIUM CHLORIDE: LD50 oral rat 3000 mg/kg; LDLo subcutaneous rat 3500 mg/kg; LD50 intraperitoneal mouse 6614 mg/kg; LD50 subcutaneous mouse 3000 mg/kg; LD50 intravenous mouse 645 mg/kg; LD50 intracardiac mouse 131 mg/kg; LDLo intraperitoneal dog 364 mg/kg; LDLo intravenous dog 2000 mg/kg; LDLo oral rabbit 5000 mg/kg.

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not listed.

Environmental Degradation: Salt is stable in the environment and is a naturally occurring compound.

# 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Follow applicable Federal, state, and local regulations. This salt, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

# 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 Rating: 1001

**State Regulatory Information** 

Company 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:** Technical Director

**Approval Date:** May 2007 **Supersedes Date:** February 2005

MSDS Number: NC12

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