

# MORTON SALT

Distributed By:  
SAL Chemical  
3036 Birch Drive  
Weirton, WV 26062  
304-748-8200

**Material Safety Data Sheet**  
MSDS # 011, Revised 3/15/2002  
Emergency Phone Number: 312/807-2000

## 1. PRODUCT IDENTIFICATION

**Chemical Name:** Sodium Chloride      **Common Name:** Salt  
**CAS Number:** 7647-14-5      **Chemical Formula:** NaCl

**Product Names (Salt with Yellow Prussiate of Soda and Sodium Silicoaluminate anti-caking agent):**  
Star Flake Dendritic ES Salt

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

	Formula	CAS #	%
Sodium Chloride	NaCl	7647-14-5	>99
Sodium Silicoaluminate	Na <sub>2</sub> O / Al <sub>2</sub> O <sub>3</sub> / SiO <sub>2</sub>	1344-00-9	<1.0
Yellow Prussiate of Soda	Na <sub>4</sub> Fe(CN) <sub>6</sub>	13601-19-9	≤0.0013

## 3. HEALTH HAZARD DATA

### Effects of Overexposure:

**Ingestion:** Very large doses can cause vomiting, diarrhea, and prostration. Oral toxicity rat LD<sub>50</sub>: 3000 mg / kg.

**Skin Contact:** Mild skin irritant.

**Eye Contact:** Moderate irritant.

**Inhalation:** Inhalation of dust may cause mild irritation to mucous membranes, nose and throat. Symptoms may include coughing, dryness and sore throat.

**Acute Systemic Effects:** Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract.

**Chronic Systemic Effects:** No information found.

**Hazard Rating**  
(0=None, 4=Extreme)

- ① Health
- ② Flammability
- ③ Reactivity

## 4. EMERGENCY AND FIRST AID PROCEDURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if irritation persists.

**Skin Contact:** Wash exposed area with soap and water. Get medical advice if irritation develops.

**Inhalation:** Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:** If large amounts were swallowed, get medical advice.

## 5. FIRE AND EXPLOSION HAZARD DATA

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Product is non-combustible; no extinguishing media or special fire-fighting procedures are required. There are no unusual fire or explosion hazards.

## 6. REACTIVITY DATA

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Stability:  Stable  Unstable

Stable and inert under normal conditions. No hazardous polymerization can occur.

**Materials to Avoid:** Will react with strong acids (to generate hydrogen chloride) and with strong oxidizing agents (to generate chlorine gas). Yellow Prussiate of Soda (YPS) may decompose when in contact with strong acids (releasing hydrogen cyanide gas), and when heated to above 400°C (to emit toxic cyanide fumes).

## 7. PHYSICAL DATA

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<b>Appearance:</b>	Colorless or white crystals	<b>pH:</b>	8 - 9
<b>Odor:</b>	None	<b>% Non-Volatile:</b>	100
<b>Density (Water = 1):</b>	2.165 g / cc	<b>Vapor Pressure (mm Hg):</b>	1 mm @ 865°C (1589°F)
<b>Solubility in Water:</b>	36 g / 100 cc water at 20°C (68°F) Sodium silicoaluminate is insoluble in water.	<b>Boiling Point (760 mm Hg):</b>	1413°C (2575°F)

## 8. SPILL OR LEAK PROCEDURES

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**Response to Small Spills:** Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

**Response to Large Spills:** Shovel and sweep up; containerize for reclamation or disposal.

**Hazards to be Avoided:** None.

**Reportable Quantity:** Check your state for requirements.

**Waste Classification:** Some states have set maximum limits on chlorides in waste effluent.

**Disposal Methods:** Whatever cannot be saved for reclamation may be delivered to an approved waste disposal facility or if local ordinances allow, can be dissolved in sufficient amounts of water to meet water quality standards, and flushed down a sewer drain. Ensure compliance with local, state and federal regulations.



## 9. SPECIAL PROTECTION INFORMATION

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- Respiratory Protection:** For conditions of use where exposure to the dust is apparent, a NIOSH approved dust/mist respirator may be worn. For emergencies, a self-contained breathing apparatus may be necessary.
- For Hands, Body:** If deemed necessary, wear protective gloves and clean body-covering clothing.
- For Eyes:** If deemed necessary, use chemical safety glasses or goggles. Contact lenses should not be worn when working with this material. Eye wash fountain or water for eyewashing should be available.
- Ventilation:** In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

## 10. SPECIAL PRECAUTIONS

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Transport in dry equipment; store in dry location. Handling procedures should minimize generation of airborne dust. Dust respirator as appropriate where exposure exceeds the 10 mg/m<sup>3</sup> ACGIH TLV for nuisance dust.

## 11. LABELING INFORMATION

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<b>DOT Shipping Name:</b>	Salt (common), sodium chloride	<b>UN No.:</b>	Not applicable
<b>DOT Label:</b>	Not applicable	<b>Additional Product Label:</b>	Not applicable
		<b>Warning:</b>	None

## 12. USER'S RESPONSIBILITY

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The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

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