

**MATERIAL SAFETY DATA SHEET  
FOR  
THORN SMITH LABORATORIES  
STUDENT REFERENCE STANDARDS AND REAGENT CHEMICALS**

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Sodium Chloride  
Catalog Number 81-1085

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Manufacturer: Auric Enterprises, Inc.  
d/b/a Thorn Smith Laboratories  
Address: 7755 Narrow Gauge Road  
Beulah, MI 49617  
Phone Number: 231-882-4672  
MSDS Number: TSL-103  
Date Prepared: March 1984  
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**SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION**

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COMPONENTS - Chemical Name & Common Names  
(Hazardous Components 1% or greater; Carcinogens 0.1% or greater)

Sodium Chloride

Common Synonyms: Common Salt; Halite  
Chemical Family: Inorganic Sodium Compounds  
Formula: NaCl  
Formula Weight: 58.44  
CAS No.: 7647-14-5  
OSHA PEL: N/E  
ACGIH TLV: N/E  
OTHER LIMITS: N/A

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**SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS**

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Boiling Point: 1413° C (2575° F)  
Specific Gravity (H<sub>2</sub>O=1): 2.163 ( )  
Vapor Pressure (mm Hg and Temperature): 1 mmHg @ 1589  
Melting Point: 801° C (1474° F) (NaCl)  
Vapor Density (Air-1): 2.17  
Evaporation Rate ( -1): N/A  
Solubility in Water: Appreciable (more than 10%)  
Water Reactive: No

Appearance and Odor: White crystals. Odorless. Salt taste.

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### SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

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Flash Point and Method Used: N/A

Auto-Ignition Temperature: N/A

Flammability Limits in Air (% by volume): N/A

LEL: N/A UEL: N/A

Extinguisher Media: Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire and Explosion Hazards: Toxic gases produced: Hydrogen chloride.

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### SECTION 4 - REACTIVITY HAZARD DATA

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STABILITY:  Stable  Unstable

Conditions to Avoid: No information found.

Incompatibility (Materials to Avoid): Strong oxidizing agents, lithium, inter-halogens (ex. Bromine trifluoride, iron, cement, strong acids.

Hazardous Decomposition Products: Hydrogen chloride.

HAZARDOUS POLYMERIZATION:  May Occur  Will Not Occur

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### SECTION 5 - HEALTH HAZARD DATA

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PRIMARY ROUTES OF ENTRY:

Inhalation  Ingestion  Skin Contact  Eye Contact  Not Hazardous

CARCINOGEN LISTED IN:

NTP  OSHA  IARC Monograph  Not Listed

TOXICITY: Sodium Chloride: LD50 (oral-rat) 3000 mg/kg; LD50 (ipr-mouse) 2602 mg/kg;

LD50 (scu-mouse) 3150 mg/kg; LD50 (iv-mouse) 645 mg/kg.

HEALTH HAZARDS - Acute:

Inhalation: Inhalation of dust may cause irritation to upper respiratory tract and mucous membranes.

Ingestion: Large doses may cause gastrointestinal irritation, weakness, and circulatory disturbances.

Skin Contact: Contact may cause irritation.

Eye Contact: Contact may cause irritation.

HEALTH HAZARDS - Chronic: Elevated blood pressure and accelerated respiration rate.

Signs and Symptoms of Exposure: No information found.

Medical Conditions Generally Aggravated by Exposure: High blood pressure.

EMERGENCY FIRST AID PROCEDURES - Seek medical assistance for further treatment, observation, and support if necessary.

Inhalation: If a person breathes in large amounts, move the exposed person to fresh air. Get medical attention.  
Ingestion: If swallowed, and the person is conscious, immediately give large amounts of water. Induce vomiting. Get medical attention.  
Skin Contact: Remove any contaminated clothing. Wipe off excess from skin. Immediately wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.  
Eye Contact: Immediately flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally.

#### SARA/TITLE III HAZARD CATEGORIES AND LISTS

Acute: No    Chronic: No    Flammability: No    Pressure: No    Reactivity: No  
Extremely Hazardous Substance:    No  
CERCLA Hazardous Substance:    No  
SARA 313 Toxic Chemicals: No  
TSCA Inventory:    Yes

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#### SECTION 6 - CONTROL AND PROTECTIVE MEASURES

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Respiratory Protection (Specify Type): None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.  
Protective Gloves:    Wear rubber gloves.  
Eye Protection:    Wear chemical safety goggles.  
VENTILATION TO BE USED:    Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.  
     Local Exhaust       Mechanical (General)       Special  
     Other(Specify)  
Other Protective Clothing and Equipment:    Wear clean body-covering clothing.  
Hygienic Work Practices:    Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

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#### SECTION 7 - PRECAUTIONS FOR SAFE HANDLING & LEAK/USE PROCEDURES

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Steps to be taken if material is spilled or released:    Wear suitable protective clothing. Carefully sweep up and remove.  
Waste Disposal Methods: For small quantities: Cautiously add to a large stirred excess of water. Adjust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous waste disposal. Flush aqueous solution down the drain with plenty of water. The hydrolysis and neutralization reactions may generate heat and fumes which can be controlled by the rate of addition. Dispose in accordance with all applicable local, state, federal environmental regulations.

Precautions to be taken in handling and storage: Keep in a tightly closed container. Suitable for any general chemical storage area. Store in accordance with all applicable local, state, and federal environmental regulations

Other precautions and/or special hazards: No information available.

NFPA Rating: No information available.

HMIS Rating: No information available.

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## SECTION 8 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

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### Domestic (D.O.T.)

Proper Shipping Name: Chemical, n.o.s. (Non-regulated)

### International (T.M.O.)

Proper Shipping Name: Chemical, n.o.s. (Non-regulated)

### AIR (I.C.A.O.)

Proper Shipping Name: Chemical, n.o.s. (Non-regulated)

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