

**MATERIAL SAFETY DATA SHEET  
FOR  
THORN SMITH LABORATORIES  
ANALYZED QUANTITATIVE UNKNOWNNS**

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Soluble Oxalate for Na<sub>2</sub>C<sub>2</sub>O<sub>4</sub>  
Catalog Number 80-1600

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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-027  
Date Prepared: December 27, 1993  
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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 Oxalate

Formula: NaOCOCOONa  
Common Synonyms: Oxalic Acid, Disodium Salt; Ethanedioic Acid, Disodium Salt  
Chemical Family: Organic Sodium Salts  
CAS No.: 62-76-0  
OSHA PEL: N/E  
ACGIH TLV: N/E  
OTHER LIMITS: N/A

Sodium Sulfate

Formula: Na<sub>2</sub>SO<sub>4</sub>  
Common Synonyms: Sulfuric Acid, Disodium Salt, Disodium sulfate.  
Chemical Family: Inorganic Sodium Compounds  
CAS No.: 7757-82-6  
OSHA PEL: According to our sources, exposure threshold levels have not been established  
(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: N/A  
Specific Gravity (H<sub>2</sub>O=1): 2.34 (NaOCOCOONa); 2.68 (Na<sub>2</sub>SO<sub>4</sub>)  
Vapor Pressure (mm Hg and Temperature): N/A

Melting Point: 260° C (500° F) (NaOCOCOONa); 884° C (1623° F) (Na<sub>2</sub>SO<sub>4</sub>)  
Vapor Density (Air=1): N/A  
Evaporation Rate (-): N/A  
Solubility in Water: Moderate (1-10%) (NaOCOCOONa); Appreciable (More than 10%) (Na<sub>2</sub>SO<sub>4</sub>)  
Water Reactive: No  
Appearance and Odor: White crystalline powder (NaOCOCOONa); White crystals or powder (Na<sub>2</sub>SO<sub>4</sub>).  
Odorless.

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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: Decomposes at melting point (NaOCOCOONa); Toxic gases produced: sulfur dioxide (Na<sub>2</sub>SO<sub>4</sub>); carbon monoxide carbon dioxide. (NaOCOCOONa).

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### SECTION 4 - REACTIVITY HAZARD DATA

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STABILITY:  Stable  Unstable  
Conditions to Avoid: Moisture (Na<sub>2</sub>SO<sub>4</sub>). Stable under ordinary conditions of use and storage.  
Incompatibility (Materials to Avoid): Aluminum, magnesium, mineral acids, strong acids, strong bases.  
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide (NaOCOCOONa); Oxides of sulfur (Na<sub>2</sub>SO<sub>4</sub>).  
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 Oxalate: No information available.  
Sodium Sulfate: LD50 (oral-mouse) 5989 mg/kg.  
HEALTH HAZARDS - Acute:  
Inhalation: May cause irritation to upper respiratory tract.  
Ingestion: Is harmful and may be fatal, nausea, vomiting, unconsciousness, irritation and burns to mouth and stomach (NaOCOCOONa); gastrointestinal irritation (Na<sub>2</sub>SO<sub>4</sub>).  
Skin Contact: Severe irritation or burns (NaOCOCOONa); irritation (Na<sub>2</sub>SO<sub>4</sub>).  
Eye Contact: Severe irritation or burns (NaOCOCOONa); irritation (Na<sub>2</sub>SO<sub>4</sub>).  
HEALTH HAZARDS - Chronic: Kidney damage (NaOCOCOONa); none identified (Na<sub>2</sub>SO<sub>4</sub>).  
Medical Conditions Generally Aggravated by Exposure: None identified.

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. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: CALL A PHYSICIAN. If swallowed, and the person is conscious, give lime water, large Amount of powdered chalk in water, or milk. Then induce vomiting (NaOCOCOONa).

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. Get medical attention.

### SARA/TITLE III HAZARD CATEGORIES AND LISTS

Acute: Yes Chronic: Yes Flammability: No Pressure: No Reactivity: No

Extremely Hazardous Substance: No

CERCLA Hazardous Substance: No

SARA 313 Toxic Chemicals: No Contains Sodium Sulfate. Generic class removed from CFR 7-9-91.

TSCA Inventory: No

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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 meet TLV requirements.

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 self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Waste Disposal Methods: Dispose in accordance with all applicable local, state, federal environmental regulations.

Precautions to be taken in handling and storage: Do not get into eyes, on skin, or clothing. Avoid breathing dust. Keep in a tightly closed container. Use with adequate ventilation. Wash thoroughly after

handling. Store in corrosion proof area (NaOCOCOONa).

Other precautions and/or special hazards: Sodium Sulfate is hygroscopic.

NFPA Rating: Health: **3** Flammability: **0** Reactivity: **0**.

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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