

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

Soluble Phosphate for P₂O₅
Catalog Number 80-1650

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-028
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SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

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

Ammonium Phosphate, Monobasic

Formula: NH₄H₂PO₄
CAS No.: 7722-76-1
OSHA PEL: N/E
ACGIH TLV: N/E
OTHER LIMITS: N/A

Sodium Sulfate

Formula: Na₂SO₄
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

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: N/A
Specific Gravity (H₂O=1): 2.68 (Na₂SO₄)
Vapor Pressure (mm Hg and Temperature): N/A
Melting Point: N/A (NH₄H₂PO₄); 884° C (1623° F) (Na₂SO₄)
Vapor Density (Air-1): 1.8 (NH₄H₂PO₄)
Evaporation Rate (-1): N/A
Solubility in Water: 22 g/100ml @ 0° C (NH₄H₂PO₄); Appreciable (More than 10%) (Na₂SO₄)

Water Reactive: No

Appearance and Odor: White crystals or powder. Odorless.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

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: sulfur dioxide (Na₂SO₄).

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: Stable Unstable

Conditions to Avoid: Moisture. Stable under ordinary conditions of use and storage.

Incompatibility (Materials to Avoid): NaOC1 (NH₄H₂PO₄); Aluminum, magnesium, mineral acids, strong acids, strong bases (Na₂SO₄).

Hazardous Decomposition Products: Reacts with strong bases to liberate ammonia (NH₄H₂PO₄); Oxides of sulfur may form when heated to decomposition (Na₂SO₄).

HAZARDOUS POLYMERIZATION: May Occur Will Not Occur

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:

Inhalation Ingestion Skin Contact Eye Contact Not Hazardous

CARCINOGEN LISTED IN:

NTP OSHA IARC Monograph Not Listed

TOXICITY: N/A Ammonium Phosphate, Monobasic.

Sodium Sulfate: LD50 (oral-mouse) 5989 mg/kg.

HEALTH HAZARDS - Acute:

Inhalation: May cause irritation to upper respiratory tract.

Ingestion: May cause gastrointestinal irritation.

Skin Contact: May cause irritation.

Eye Contact: May cause irritation.

HEALTH HAZARDS - Chronic: None identified.

Signs and Symptoms of Exposure: No information found.

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.

Ingestion: If swallowed, and the person is conscious, immediately give large amounts of milk or 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. Get medical attention if irritation persists.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

Acute: Yes (Na₂SO₄) Chronic: Yes (Na₂SO₄) Flammability: No Pressure: No
Reactivity: No
Extremely Hazardous Substance: No
CERCLA Hazardous Substance: No
SARA 313 Toxic Chemicals: Yes (Na₂SO₄) Contains Sodium Sulfate. Generic class removed from CFR 7-9-91.
TSCA Inventory: Yes (Na₂SO₄)

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

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 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.

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

Steps to be taken if material is spilled or released: Wear suitable protective clothing. Carefully sweep up and remove.

Waste Disposal Methods: 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. Isolate from incompatible materials. Protect against physical damage. Store in accordance with all applicable local, state, and federal environmental regulations.

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

NFPA Rating: Health: **1** Flammability: **0** Reactivity: **0**.

HMIS Rating: No information available.

SECTION 8 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

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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