

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

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Potassium Biphthalate for acidity  
Catalog Number 80-1475

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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-002  
Date Prepared: September 7, 1989  
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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)

Potassium Biphthalate

Formula:  $\text{KHC}_8\text{H}_4\text{O}_4$   
CAS No.: 877-24-7  
OSHA PEL: According to our sources, exposure threshold levels have not been established (N/E).  
ACGIH TLV: N/E  
OTHER LIMITS: N/A

Sodium Chloride

Formula: NaCl  
CAS No.: 7647-14-5  
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: 1413° C (2575° F) (NaCl)  
Specific Gravity (H<sub>2</sub>O=1): 1.64 (KHC<sub>8</sub>H<sub>4</sub>O<sub>4</sub>); 2.16 (NaCl)  
Vapor Pressure (mm Hg and Temperature): <1 (NaCl)  
Melting Point: 801° C (1474° F) (NaCl)

Vapor Density (Air-1): N/A

Evaporation Rate ( -1): N/A

Solubility in Water: 25mg/100ml cold water (KHC<sub>8</sub>H<sub>4</sub>O<sub>4</sub>); appreciable (more than 10%) (NaCl).

Water Reactive: No

Appearance and Odor: Colorless or white crystals (KHC<sub>8</sub>H<sub>4</sub>O<sub>4</sub>); white crystalline solid (NaCl). 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: Water spray, dry chemical, alcohol foam, or carbon dioxide.

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: As with most organic solids, fire is possible at elevated temperatures or

by contact with an ignition source. Not considered to be an explosion hazard.

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### SECTION 4 - REACTIVITY HAZARD DATA

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STABILITY:  Stable  Unstable

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

Incompatibility (Materials to Avoid): Nitric acid, strong oxidizing agents, lithium, inter-halogens, iron, cement.

Hazardous Decomposition Products: Oxides of carbon and potassium may form when heated to decomposition.

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: Potassium Biphthalate: No LD50/LC50 information found relating to normal routes of occupational exposure.

Sodium Chloride: LD50 (oral-rat) 3000 mg/kg; LD50 (ipr-mouse) 2602 mg/kg; LD50 (scu-mouse) 3150 mg/kg; KD50 (iv-mouse) 645 mg/kg.

HEALTH HAZARDS - Acute:

Inhalation: May cause irritation to upper respiratory tract and mucous membranes because of slight acidity. Symptoms may include coughing and sore throat.

Ingestion: Large doses may cause nausea, vomiting and abnormal sensations in hands and feet.

Because

of the slight acidity, causes irritation to the mucous membranes. May cause gastrointestinal irritation.

Skin Contact: May cause minor irritation, with redness and pain.

Eye Contact: May cause irritation and damage.

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: Move the exposed person to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Give water or milk to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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 immediately.

#### 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: No

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### SECTION 6 - CONTROL AND PROTECTIVE MEASURES

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Respiratory Protection (Specify Type): For conditions of use where exposure to the dust is apparent, a NIOSH approved dust/mist respirator may be worn. For emergencies, a NIOSH approved self-contained breathing apparatus may be necessary.

Protective Gloves: Wear rubber gloves to prevent contact with substance.

Eye Protection: Wear chemical safety goggles. Contact lenses should not be worn when working with this

material. Maintain eye wash fountain and quick-drench facilities in work area.

VENTILATION TO BE USED: A local exhaust system which captures the contaminant at its source is recommended to prevent dispersion of the contaminant in the workroom air.

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: Ventilate area of leak or spill. Clean-up personnel may require respiratory protection from dust. Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

Waste Disposal Methods: Whatever cannot be saved for reclamation may be delivered to an approved waste disposal facility. Small amounts of residue may be flushed to sewer with plenty of water. 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 stored in a cool, dry ventilated area. Protect against physical damage. Store in accordance with all applicable local, state, and federal environmental regulations.

Other precautions and/or special hazards:

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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