MATERIAL SAFETY DATA SHEET
FOR
THORN SMITH LABORATORIES
ANALYZED QUANTITATIVE UNKNOWNS

Potassium Biphthalate for acidity
Catalog Number 80-1475

Manufacturer: Thorn Smith Laboratories
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MSDS Number: TSL-002
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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)
Potassium Biphthalate
  Formula: KHC₈H₄O₄
  CAS No.: 877-24-7
  OSHA PEL: According to our sources, exposure threshold levels have not been established.
  ACGIH TLV: According to our sources, exposure threshold levels have not been established.
  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.
  ACGIH TLV: According to our sources, exposure threshold levels have not been established.
  OTHER LIMITS: N/A

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 1413 °C (2575 °F) (NaCl)
Specific Gravity (H₂O = 1): 1.64 (KHC₈H₄O₄); 2.16 (NaCl)
Vapor Pressure (mm Hg and Temperature): <1 (NaCl)
Melting Point: 801 °C (1474 °F) (NaCl)
Vapor Density (Air = 1): No information found.
Evaporation Rate (_____ = 1): No information found.
Solubility in Water: 25g/100ml cold water (KHC₈H₄O₄); appreciable (more than 10%) (NaCl).
Water Reactive: No.
Appearance and Odor: Colorless or white crystals (KHC₈H₄O₄); white crystalline solid (NaCl). Odorless.
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used: No information found.
Auto-Ignition Temperature: No information found.
Flammability Limits in Air (% by Volume): No information found.
  LEL: No information found.  UEL: No information found.
Extinguisher Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.
Special Fire Fighting Procedures: In the event of a fire, wear full protective clothing
  and NIOSH-approved self-contained breathing apparatus with full facepiece
  operated in the pressure demand or other 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.

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY:
  _X_ 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  _X_ Will Not Occur
Conditions to Avoid: No information found.

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:
  _X_ Inhalation  _X_ Ingestion  _X_ Skin Contact  _X_ Eye Contact
  ___ Not Hazardous
CARCINOGEN LISTED IN:
  ___ NTP  ___ OSHA  ___ IARC Monograph
  _X_ 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; LD50 (iv-mouse)
645 mg/kg.
HEALTH HAZARDS - Acute:
  Inhalation: May cause irritation to mucous membranes because of slight acidity.
    Symptoms may include coughing and sore throat. May cause irritation to upper
    respiratory tract.
  Ingestion: Large doses may produce 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: Contact may cause irritation, with redness and pain.
  Eye contact: 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: Remove 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.
Wash skin with soap and water for at least 15 minutes. Get medical attention if
irritation develops or persists.
Eye Contact: Wash eyes with plenty of water for at least 15 minutes, lifting upper
and lower eyelids occasionally. Get medical attention immediately.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

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 protective gloves.
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.

_X_ Local Exhaust   ___ Mechanical (General)   ___ Special

Other (Specify):

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 AND
USE / LEAK PROCEDURES

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,
and 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.

Health ___ Flammability ___ Reactivity ___ Special ___
HMIS Rating: No information available.
Health ___  Flammability ___  Reactivity ___  Personal Protection ___

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