1. Product Identification

Synonyms: Potassium bisulfate; potassium acid sulfate; sulfuric acid, monopotassium salt
CAS No.: 7646-93-7
Molecular Weight: 136.17
Chemical Formula: KHSO₄
Product Codes:
J.T. Baker: 2960
Macron: 7112

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric Acid, Monopotassium Salt</td>
<td>7646-93-7</td>
<td>90 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. MAY BE HARMFUL IF SWALLOWED.

SAF-T-DATA™ Ratings (Provided here for your convenience)

Health Rating: 3 - Severe
Flammability Rating: 0 - None
Reactivity Rating: 1 - Slight
Contact Rating: 4 - Extreme (Corrosive)
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
Storage Color Code: White (Corrosive)

Potential Health Effects
**Inhalation:**
Corrosive. Inhalation produces damaging effects on the mucous membranes and upper respiratory tract. Symptoms may include soreness in nasal passages, irritation of the throat, possible coughing and sneezing, labored breathing.

**Ingestion:**
Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea.

**Skin Contact:**
Corrosive. Symptoms of redness, pain, and severe burn can occur.

**Eye Contact:**
Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns.

**Chronic Exposure:**
No information found.

**Aggravation of Pre-existing Conditions:**
No adverse health effects expected.

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### 4. First Aid Measures

**Inhalation:**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:**
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:**
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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### 5. Fire Fighting Measures

**Fire:**
Not considered to be a fire hazard.

**Explosion:**
Not considered to be an explosion hazard.

**Fire Extinguishing Media:**
Use any means suitable for extinguishing surrounding fire.

**Special Information:**
Use protective clothing and breathing equipment appropriate for the surrounding fire.

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### 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.
7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**
None established.

**Ventilation System:**
In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

**Personal Respirators (NIOSH Approved):**
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

**WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:**
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

**Appearance:**
White powder.

**Odor:**
Odorless.

**Solubility:**
56g in 100g of water.

**Specific Gravity:**
2.24

**pH:**
No information found.

**% Volatiles by volume @ 21C (70F):**
0

**Boiling Point:**
Not applicable.

**Melting Point:**
197C (387F)

**Vapor Density (Air=1):**
No information found.

**Vapor Pressure (mm Hg):**
No information found.

**Evaporation Rate (BuAc=1):**
No information found.
10. Stability and Reactivity

**Stability:**
Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**
Oxides of sulfur and the contained metal.

**Hazardous Polymerization:**
Will not occur.

**Incompatibilities:**
Strong bases.

**Conditions to Avoid:**
Moisture and incompatibles.

11. Toxicological Information

Oral rat LD50: 2340 mg/kg.

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\Cancer Lists\---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen</th>
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<tbody>
<tr>
<td>Sulfuric Acid, Monopotassium Salt (7646-93-7)</td>
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</table>

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12. Ecological Information

**Environmental Fate:**
No information found.

**Environmental Toxicity:**
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

**Domestic (Land, D.O.T.)**

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**Proper Shipping Name:** POTASSIUM HYDROGEN SULFATE

**Hazard Class:** 8

**UN/NA:** UN2509

**Packing Group:** II

**Information reported for product/size:** 12KG

**International (Water, I.M.O.)**

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15. Regulatory Information

---\Chemical Inventory Status - Part 1\---------------------------------

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
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<th>Australia</th>
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---\Chemical Inventory Status - Part 2\---------------------------------

-Canada-

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---\Federal, State & International Regulations - Part 1\----------------

<table>
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<tr>
<th>Ingredient</th>
<th>-SARA 302-</th>
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---\Federal, State & International Regulations - Part 2\----------------

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<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
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<td>Sulfuric Acid, Monopotassium Salt (7646-93-7)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Chemical Weapons Convention:  No    TSCA 12(b):  No     CDTA:  No
SARA 311/312:  Acute: Yes    Chronic: No    Fire: No    Pressure: No
Reactivity: No    (Pure / Solid)

Australian Hazchem Code: 2R

Poison Schedule: None allocated.

WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0
Label Hazard Warning:
DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. MAY BE HARMFUL IF SWALLOWED.
Label Precautions:
Do not get in eyes, on skin, or on clothing.
Do not breathe dust.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In all cases get medical attention immediately.

Product Use:
Laboratory Reagent.

Revision Information:
No Changes.

Disclaimer:
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Prepared by: Environmental Health & Safety