1. Product Identification

**Synonyms:** Sulfuric acid dipotassium salt; sal polychrestum  
**CAS No.:** 7778-80-5  
**Molecular Weight:** 174.26  
**Chemical Formula:** K2SO4  
**Product Codes:**  
J.T. Baker: 3278, 3282  
Macron: 1541, 4525, 4553, 4688, 4698, 6349, 7128, 7130, 7132, 7133, 7139, 7140, 7144, 7148, 7153, 7167

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>Potassium Sulfate</td>
<td>7778-80-5</td>
<td>90 - 100%</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Hazards Identification

**Emergency Overview**

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

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

- **Health Rating:** 1 - Slight  
- **Flammability Rating:** 0 - None  
- **Reactivity Rating:** 1 - Slight  
- **Contact Rating:** 1 - Slight  
- **Lab Protective Equip:** GOGGLES; LAB COAT; PROPER GLOVES  
- **Storage Color Code:** Green (General Storage)

**Potential Health Effects**
Inhalation:
Possible nuisance dust effect, sneezing or coughing.

Ingestion:
Large oral dosages may produce gastrointestinal disturbances and irritation.

Skin Contact:
Not expected to be a health hazard from skin exposure.

Eye Contact:
No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:
Not expected to be a health hazard. Potassium poisoning may occur in rare cases of long exposure or ingestion.

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

4. First Aid Measures

Inhalation:
Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:
If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:
Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:
Wash thoroughly with running water. Get medical advice if irritation develops.

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.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills:
Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.
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 protective gloves and clean body-covering clothing.

Eye Protection:
Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:
White granules or powder.

Odor:
Odorless.

Solubility:
Soluble in water.

Density:
2.66

pH:
ca. 7

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

Boiling Point:
1689C (3072F)

Melting Point:
1067C (1953F)

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 potassium.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Aluminum and magnesium.

Conditions to Avoid:
Incompatibles.
11. Toxicological Information

LD50 Oral Rat: 6600 mg/kg.

--- Cancer Lists ---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Known</th>
<th>NTP Anticipated</th>
<th>IARC Category</th>
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<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

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 disposal facility. 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

Not regulated.

15. Regulatory Information

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

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

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<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
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--- Federal, State & International Regulations - Part 1 ---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
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<td>List</td>
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--- Federal, State & International Regulations - Part 2 ---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
<th>8(d)</th>
</tr>
</thead>
</table>
Chemical Weapons Convention: No  TSCA 12(b): No  CDTA: No
SARA 311/312: Acute: No  Chronic: No  Fire: No  Pressure: No
Reactivity: No  (Pure / Solid)

Australian Hazchem Code: None allocated.
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: As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.
Label Precautions: None.
Label First Aid: Not applicable.
Product Use: Laboratory Reagent.
Revision Information: No Changes.

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Prepared by: Environmental Health & Safety