# POTASSIUM ACID PHTHALATE

## 1. Product Identification

**Synonyms:**
1.2-Benzenedicarboxylic acid monopotassium salt; potassium biphthalate; potassium hydrogen phthalate; Phthalic acid, potassium salt

**CAS No.:**
\[ \text{\textcopyright} \]

**Molecular Weight:** 204.23

**Chemical Formula:** HOOC-C6H4COOK

**Product Codes:**
- J.T. Baker: 2958, 4889
- Macron: 6704

## 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 Acid Phthalate</td>
<td>877-24-7</td>
<td>100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## 3. Hazards Identification

**Emergency Overview**

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**SAF-T-DATA\(^\text{tm}\) Ratings** (Provided here for your convenience)

<table>
<thead>
<tr>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Rating: 0 - None</td>
</tr>
<tr>
<td>Flammability Rating: 1 - Slight</td>
</tr>
<tr>
<td>Reactivity Rating: 0 - None</td>
</tr>
<tr>
<td>Contact Rating: 1 - Slight</td>
</tr>
<tr>
<td>Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES</td>
</tr>
<tr>
<td>Storage Color Code: Green (General Storage)</td>
</tr>
</tbody>
</table>

**Potential Health Effects**
Information on the human health effects from exposure to this substance is limited.

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

**Ingestion:**
Large doses may produce nausea, vomiting, and abnormal sensations in hands and feet. Because of slight acidity, causes irritation to the mucous membranes.

**Skin Contact:**
Contact may cause irritation, with redness and pain.

**Eye Contact:**
May cause eye irritation.

**Chronic Exposure:**
No information found.

**Aggravation of Pre-existing Conditions:**
No information found.

4. First Aid Measures

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

**Ingestion:**
Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**
Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if irritation develops.

**Eye Contact:**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

5. Fire Fighting Measures

**Fire:**
As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

**Explosion:**
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Fire Extinguishing Media:**
Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Special Information:**
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.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.
7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. 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:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

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:
Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:
Colorless or white crystals.

Odor:
Odorless.

Solubility:
25g/100ml cold water

Specific Gravity:
1.64

pH:
4.0 0.05M soln.: 0

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

Boiling Point:
No information found.

Melting Point:
No information found.

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:**
Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Hazardous Polymerization:**
Will not occur.

**Incompatibilities:**
Nitric Acid. Strong oxidizing agents.

**Conditions to Avoid:**
Heat, ignition sources and incompatibilities.

11. Toxicological Information

Oral rat LD50: >3200 mg/kg

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**Cancer Lists**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known</th>
<th>Anticipated</th>
<th>IARC Category</th>
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</thead>
<tbody>
<tr>
<td>Potassium Acid Phthalate (877-24-7)</td>
<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

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**Chemical Inventory Status - Part 1**

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<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
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<td>Yes</td>
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<td>Yes</td>
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**Chemical Inventory Status - Part 2**

<table>
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<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
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<tbody>
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</table>
Potassium Acid Phthalate (877-24-7)  Yes  Yes  No  Yes

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<thead>
<tr>
<th>Ingredient</th>
<th>RQ</th>
<th>TPQ</th>
<th>List</th>
<th>Chemical Catg.</th>
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<tbody>
<tr>
<td>Potassium Acid Phthalate (877-24-7)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
<th>8(d)</th>
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<tbody>
<tr>
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<td>No</td>
<td>No</td>
<td>No</td>
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</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:** 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: 1 Reactivity: 0  
**Label Hazard Warning:** CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.  
**Label Precautions:** Avoid breathing dust. Avoid contact with eyes, skin and clothing. Keep container closed. Wash thoroughly after handling. Use with adequate ventilation.  
**Label First Aid:** In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. Call a physician if irritation develops or persists. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.  
**Product Use:** Laboratory Reagent.  
**Revision Information:** No Changes.  
**Disclaimer:**

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continued
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Prepared by: Environmental Health & Safety