Material Safety Data Sheet
Potassium hydrogen phthalate

ACC# 19425

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium hydrogen phthalate  
**Catalog Numbers:** AC177120000, AC177120050, AC417950000, AC417951000, AC417955000, AC424060000, AC424060050, AC424061000, AC424065000, 17712-1000, 17712-5000, B79, NC9618461, P243-100, P243-500, P245-60  
**Synonyms:** Potassium biphthalate; Potassium acid phthalate.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**Emergency Number:** 201-796-7100  
**For CHEMTREC assistance, call:** 800-424-9300  
**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>877-24-7</td>
<td>Potassium hydrogen phthalate</td>
<td>99+</td>
<td>212-889-4</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white crystals.  
**Caution!** May cause eye, skin, and respiratory tract irritation.  
**Target Organs:** None known.

**Potential Health Effects**

**Eye:** May cause eye irritation.  
**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.  
**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.  
**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.  
**Chronic:** No information found.

Section 4 - First Aid Measures
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Do not induce vomiting. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

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### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not available.

** Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 1; Instability: 0

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### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

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### Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydrogen phthalate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>
OSHA Vacated PELs: Potassium hydrogen phthalate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystals
Appearance: white
Odor: odorless
pH: 3.8 - 4.0 (5% aq. sol.)
Vapor Pressure: Not applicable.
Vapor Density: Not applicable.
Evaporation Rate: Not applicable.
Viscosity: Not applicable.
Boiling Point: Not applicable.
Freezing/Melting Point: 295 - 300 deg C
Decomposition Temperature: Not available.
Solubility: 80 g/L @ 20°C
Specific Gravity/Density: 1.636
Molecular Formula: C8H5KO4
Molecular Weight: 204.22

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, nitric acid.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of potassium, potassium fume.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: 
CAS# 877-24-7: CZ4326000
LD50/LC50:
LD50: 877-24-7:
   Dermal, guinea pig: LD50 = >1 gm/kg;
   Oral, rat: LD50 = >3200 mg/kg;
Carcinogenicity:
CAS# 877-24-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: Boys of moms highly exposed to phthalates show stunted genitals. The higher the levels of phthalates in the mothers during the final months of pregnancy, the less masculine their boys were when examined by pediatricians. (Pittsburgh Post-Gazette 5/27/05)
Reproductive Effects: The phthalate esters have been the subject of interest because of the reproductive and developmental toxicity of some members of this group such as DEHP.
Mutagenicity: No information found
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

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<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>Not regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
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<tr>
<td>UN Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group:</td>
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</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA

http://fscimage.fishersci.com/msds/19425.htm
CAS# 877-24-7 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 877-24-7: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 877-24-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
Not available.

Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 877-24-7: No information available.

Canada - DSL/NDSL
CAS# 877-24-7 is listed on Canada’s DSL List.

Canada - WHMIS
This product has a WHMIS classification of Not controlled.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List
Section 16 - Additional Information

MSDS Creation Date: 12/12/1997
Revision #9 Date: 2/15/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.