SAFETY DATA SHEET

Product code: P1190
Product Name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS

Other means of identification
Synonyms:
Hydrogen potassium phthalate
Phthalic acid, monopotassium salt
Potassium acid phthalate
Potassium Hydrogen Phthalate
Potassium Biphthalate
CAS #: 877-24-7
RTECS #: CZ4326000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: No information available.
Uses advised against: No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number
Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Product code: P1190
Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
Not classified

Hazard not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
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<tbody>
<tr>
<td>Potassium Biphthalate</td>
<td>877-24-7</td>
<td>100</td>
<td>*</td>
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</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms Health injuries are not known or expected under normal use.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.

Product code: P1190

Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
Unsuitable Extinguishing Media:
No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products:
Carbon oxides, potassium oxides

Specific hazards:
May be combustible at high temperatures

Special Protective Actions for Firefighters

Specific Methods:
No information available.

Special Protective Equipment for Firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Oxidizing agents. Nitric acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Product code: P1190
Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>United States</th>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<tbody>
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<td>None</td>
<td>None</td>
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Canada

Canada Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Biphthalate - 877-24-7</td>
<td>None</td>
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</table>

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>Potassium Biphthalate 877-24-7</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- **Eye protection:** Goggles. Safety glasses with side-shields.
- **Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.
- **Respiratory protection:** Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.
- **Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
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<table>
<thead>
<tr>
<th>Odor:</th>
<th>Taste</th>
<th>Molecular/Formula weight:</th>
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<th>Upper Explosion Limit (%):</th>
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<table>
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<th>pH:</th>
<th>Melting point/range(°C/°F):</th>
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<table>
<thead>
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<th>Boiling point/range(°C/°F):</th>
<th>Decomposition temperature(°C/°F):</th>
<th>Bulk density:</th>
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<tbody>
<tr>
<td>No information available</td>
<td>295 °C/563 °F</td>
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<table>
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<tr>
<th>Specific gravity:</th>
<th>Vapor pressure @ 20°C (kPa):</th>
<th>Density (g/cm3):</th>
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<tr>
<th>Evaporation rate:</th>
<th>Vapor density:</th>
<th>VOC content (g/L):</th>
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<table>
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<th>Viscosity:</th>
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<tr>
<th>Miscibility:</th>
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<td>No information available</td>
<td>Soluble in Water</td>
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<td>Solubility in Water: 25g/100 ml in cold water; 10 g/100 ml @ 25 °C</td>
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<tr>
<td></td>
<td>Solubility in Water: 8 g/100 ml @ 20 °C</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents

Chemical stability
Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions:
Hazardous polymerization does not occur

Conditions to avoid:
Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.

Incompatible Materials:
Oxidizing agents. Nitric acid.

Hazardous decomposition products:

Other Information
Corrosivity:
No information available

Special Remarks on Corrosivity:
No information available

Product code: P1190
Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

Potassium Biphthalate - 877-24-7

| LD50/oral/rat | > 3200 mg/kg Oral LD50 Rat |
| LD50/oral/mouse | No information available |
| LD50/dermal/rat | No information available |
| LD50/dermal/rabbit | No information available |
| LC50/inhalation/rat | No information available |
| LC50/inhalation/mouse | No information available |
| Other LD50 or LC50 information | >1 g/kg Dermal LD50 Guinea Pig |

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = >3200mg/kg

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE-Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation. Substance may cause slight skin irritation.

Eye Contact: Contact with eyes may cause irritation. May cause slight irritation.

Inhalation May cause irritation of respiratory tract. Symptoms may include coughing, bronchospasm.

Ingestion Health injuries are not known or expected under normal use.

Product code: P1190

Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
Aspiration hazard: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity: No information available

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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<tbody>
<tr>
<td>Potassium Biphthalate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Reproductive toxicity: No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure: No information available

STOT - repeated exposure: No information available

Target Organs: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Product code: P1190

Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Biphthalate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: None
- ERG No: No information available
- Marine Pollutant: No data available
- DOT RQ (lbs): No information available

TDG (Canada)
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available

ADR
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Classification Code: No information available
- Description: No information available
- CEFIC Tremcard No: No information available

IMO / IMDG
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available
- IMDG Page: No information available
- Marine Pollutant: No information available
- MFAG: No information available
- Maximum Quantity: No information available

RID
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available

Product code: P1190
Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
14. TRANSPORT INFORMATION

- **Packing Group:** No information available
- **Classification Code:** No information available
- **Description:** No information available

**ICAO**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

**IATA**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** No information available
- **Description:** No information available

15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS (3)-1342</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</thead>
<tbody>
<tr>
<td>Potassium Biphthalate</td>
<td>Present</td>
<td>Present KE-02310</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present 212-889-4</td>
</tr>
</tbody>
</table>

**U.S. Regulations**

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

- **Chemicals Known to the State of California to Cause Cancer:**
  This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

- **Chemicals Known to the State of California to Cause Reproductive Toxicity:**
  This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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</thead>
<tbody>
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<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
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</tbody>
</table>

**CERCLA/SARA**

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Biphthalate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

**U.S. TSCA**

- **Product code:** P1190
- **Product name:** POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
Components | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) - Health and Safety Reporting
---|---|---
Potassium Biphthalate | Not Applicable | Not Applicable

Canada

WHMIS hazard class:
Non-controlled

Potassium Biphthalate
Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
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<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
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<tbody>
<tr>
<td>Potassium Biphthalate</td>
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<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<tbody>
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<td>Potassium Biphthalate</td>
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EU Classification

R-phrase(s)
not determined (not applicable)

S -phrase(s)
one

<table>
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<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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<td>Potassium Biphthalate</td>
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Not dangerous

Product code: P1190
Product name: POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, CRYSTAL, REAGENT SPECIAL, ACS
16. OTHER INFORMATION

Preparation Date: 01/21/2015
Revision Date: 1/21/2015
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet