SECTION 1: Identification

1.1. Identification

Product form: Substance
Substance name: Potassium Hydrogen Phthalate
CAS-No.: 877-24-7
Product code: LC18690
Formula: C8H6O4K
Synonyms: Potassium Acid Phthalate

1.2. Recommended use and restrictions on use

Use of the substance/mixture: For laboratory and manufacturing use only.

1.3. Supplier

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Serious eye damage/eye irritation, Category 2B
H320 - Causes eye irritation

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling
Signal word (GHS-US): Warning
Hazard statements (GHS-US): H320 - Causes eye irritation
Precautionary statements (GHS-US):
P264 - Wash exposed skin thoroughly after handling
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification: None.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydrogen Phthalate</td>
<td>(CAS-No.) 877-24-7</td>
<td>100</td>
<td>Eye Irrit. 2B, H320</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
**First aid measures after inhalation**: Assure fresh air breathing. Allow the victim to rest.

**First aid measures after skin contact**: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

**First aid measures after eye contact**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First aid measures after ingestion**: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2 Most important symptoms and effects (acute and delayed)

- **Symptoms/effects after inhalation**: None under normal use.
- **Symptoms/effects after skin contact**: No data available.
- **Symptoms/effects after eye contact**: Causes eye irritation.
- **Symptoms/effects after ingestion**: Nausea.
- **Chronic symptoms**: Not available.

### 4.3 Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

**SECTION 5: Fire-fighting measures**

#### 5.1 Suitable (and unsuitable) extinguishing media

- **Unsuitable extinguishing media**: Do not use a heavy water stream.

#### 5.2 Specific hazards arising from the chemical

No additional information available

#### 5.3 Special protective equipment and precautions for fire-fighters

- **Firefighting instructions**: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- **Protection during firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

**6.1.1 For non-emergency personnel**

- **Protective equipment**: Safety glasses.
- **Emergency procedures**: Evacuate unnecessary personnel.

**6.1.2 For emergency responders**

- **Protective equipment**: Equip cleanup crew with proper protection.
- **Emergency procedures**: Ventilate area.

#### 6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3 Methods and material for containment and cleaning up

- **Methods for cleaning up**: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

#### 6.4 Reference to other sections

See Heading 8. Exposure controls and personal protection.

**SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

- **Precautions for safe handling**: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
- **Hygiene measures**: Do not eat, drink or smoke when using this product.

#### 7.2 Conditions for safe storage, including any incompatibilities

- **Storage conditions**: Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container closed when not in use.
- **Incompatible products**: Strong bases. Strong acids.
- **Incompatible materials**: None known.
## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters
No additional information available

### 8.2. Appropriate engineering controls
Appropriate engineering controls: Provide adequate general and local exhaust ventilation. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**
Safety glasses. Gloves.

**Hand protection:**
Wear protective gloves

**Eye protection:**
Chemical goggles or safety glasses

**Respiratory protection:**
None necessary.

**Other information:**
Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless crystalline solid or powder.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>4 - 4.02 0.05M solution at 25°C</td>
</tr>
<tr>
<td>Melting point</td>
<td>295 - 300 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.64 g/cm³</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>204.23 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Potassium Hydrogen Phthalate
Safety Data Sheet

Viscosity, dynamic: No data available
Explosive limits: No data available
Explosive properties: Not applicable.
Oxidising properties: None.

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure: Skin and eyes contact; Inhalation
Acute toxicity: Not classified

Potassium Hydrogen Phthalate (877-24-7)

LD50 oral rat: ≥ 3200 mg/kg
ATE US (oral): 3200 mg/kg bodyweight

Skin corrosion/irritation: Not classified
pH: 4 - 4.02 0.05M solution at 25°C

Serious eye damage/irritation: Causes eye irritation.
pH: 4 - 4.02 0.05M solution at 25°C

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/effects after inhalation: None under normal use.
Symptoms/effects after skin contact: No data available.
Symptoms/effects after eye contact: Causes eye irritation.
Symptoms/effects after ingestion: Nausea.
Chronic symptoms: Not available.

SECTION 12: Ecological information

12.1. Toxicity
No additional information available
Potassium Hydrogen Phthalate
Safety Data Sheet

12.2. Persistence and degradability

Potassium Hydrogen Phthalate (877-24-7)
Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Potassium Hydrogen Phthalate (877-24-7)
Bioaccumulative potential: Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations
Potassium Hydrogen Phthalate (877-24-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes

Health hazard - Serious eye damage or eye irritation

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations
CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information
Revision date: 05/23/2017
Other information: None.

Full text of H-statements: see section 16:

H320 Causes eye irritation
Potassium Hydrogen Phthalate
Safety Data Sheet

NFPA health hazard: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity: 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating
Health: 0 Minimal Hazard - No significant risk to health
Flammability: 0 Minimal Hazard - Materials that will not burn
Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection: A
A - Safety glasses

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