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Written by: Caroline Spiteci  Signature/Date: 24.1.14
Reviewed by: Nicolette Sammar Signature/Date: 24.1.14
Approved by: Lilian V. Azzopard Signature/Date: 5/2/14
1. Chemical Product

**Product Name:** Potassium Hydrogen Phthalate

**Chemical name:** Not Applicable

**Synonyms:** Potassium biphthalate; Potassium acid phthalate; Buffer Salt pH 4.01; Phthalic acid, potassium salt; Potassium acid phthalate

**Chemical Formula:** $\text{C}_8\text{H}_5\text{KO}_4$

2. Composition and Information on Ingredients

**Composition:** Not Applicable

**Toxicological Data on Ingredients:** Not Applicable

3. Hazards Identification

**Potential Acute Health Effects:** May cause eye, skin, digestive tract and respiratory tract irritation.

**Potential Chronic Health Effects:** Not Applicable

**CARCINOGENIC EFFECTS:** Not Applicable

**MUTAGENIC EFFECTS:** Not Applicable

**TERATOGENIC EFFECTS:** Not Applicable

**DEVELOPMENTAL TOXICITY:** Not Applicable

4. First Aid Measures

**General measures:**

**Skin contact:** Immediately flush skin with plenty of water for at least 15 minutes. Seek medical attention if irritation develops or persists.

**Serious skin contact:** Immediately flush skin with plenty of water for at least 15 minutes. Seek medical attention if irritation develops or persists.
**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention if irritation develops.

**Ingestion:** Never induce vomiting unless directed by medical personnel but give large quantities of water. Seek medical attention if irritation or symptoms occur.

**Serious ingestion:** Not Applicable

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

**Serious inhalation:** Not Applicable

### 5. Fire and Explosion Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability of the Product</strong></td>
<td>Non-flammable</td>
</tr>
<tr>
<td><strong>Auto-Ignition Temperature</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Flash points</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Flammable limits</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Products of Combustion</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Fire Hazards in Presence of Various Substances</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Explosion Hazards in Presence of Various Substances</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Fire fighting media and Instructions</strong></td>
<td>In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. An appropriate breathing apparatus and full protective gear should be worn.</td>
</tr>
<tr>
<td><strong>Special Remarks on Fire Hazards</strong></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Special Remarks on Explosion Hazards: Not Applicable

6. Accidental Release Measures

NB: Wear appropriate protective equipment/clothing including gloves before removing any spills.

Spills: Vacuum or sweep up the material by avoiding the generation of dusty conditions. Proper ventilation should be provided.

7. Handling and Storage

Precautions: Provide adequate ventilation

Storage: Keep in a tightly closed container which is stored in a cool dry place

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: Not Applicable

Engineering Controls: An eyewash facility and a safety shower should be present. Use adequate ventilation to keep airborne concentrations low.

Personal Protection: Wear appropriate protective eyeglasses, protective gloves, protective clothing and appropriate respirator.

9. Physical and Chemical Properties

Physical state and appearance: White crystals
Odour: Odourless
Taste: Not Applicable
Molecular Weight: 204.23g
pH (5% solution/water): 3.8 - 4.0 (5% aq. sol.)
Boiling Point: Not Applicable
Melting Point: 295 - 300°C
Critical Temperature: Not Applicable
Specific Gravity (Water = 1): 1.64
Vapour Pressure (mmHg): Negligible
### Vapour Density
Negligible

### Volatility
Not Applicable

### Odour Threshold
Not Applicable

### Water/Oil Distribution Coefficient
Not Applicable

### Ionicity (in Water)
Not Applicable

### Dispersion Properties
Not Applicable

### Solubility
Soluble in water 80 g/L @ 20°C

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#### 10. Stability and Reactivity Data

**Stability:** Stable under normal temperatures and pressures

**Corrosivity:** Not Applicable

**Instability temperature:** Not Applicable

**Conditions of Instability:** Incompatible materials, dust generation, excess heat

**Incompatibles:** Strong oxidising agents; nitric acid

**Polymerization:** Not Applicable

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#### 11. Toxicological Information

**Toxicity to animals:**
- Dermal, guinea pig: LD50 > 1 gm/kg;
- Oral, rat: LD50 > 3200 mg/kg;

**Effects on humans:**
- **Acute potential health effects:** May cause eye, skin, digestive tract and respiratory tract irritation.

**Chronic potential health effects:** Not Applicable

**MUTAGENIC EFFECTS:** Not Applicable

**TERATOGENIC EFFECTS:** Not Applicable

**DEVELOPMENTAL TOXICITY:** Not Applicable
**Other information:** Not Applicable

### 12. Ecological Information

**Ecotoxicity:** Not Applicable

### 13. Disposal Considerations

**Waste Disposal:** What is not recycled must be handled as hazardous waste and sent to an approved incinerator or disposed in an approved waste facility. Dispose of in the container marked WATER SOLUBLE NON-HALOGENATED WASTE.

### 14. References


### 15. Appendices

Not applicable

### 16. Revision History

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Amendments/ Reasons for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Initial Release</td>
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