Material Safety Data Sheet

1. Product Identification

Product Name: Calkine Acid Phosphatase Kit (α-Naphthylphosphate kinetic method)
Catalog Number: ACP 120

2. Composition / Information on Hazardous Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>% W/V</th>
<th>ACGIH TLV</th>
<th>OSHA STEL</th>
<th>OTHER PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrate buffer</td>
<td></td>
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<tr>
<td>Citric acid</td>
<td>5949-29-1</td>
<td>3.15%</td>
<td>N/A</td>
<td>N/A</td>
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</table>

Reagent 2: N/A

Reagent 3: N/A

Reagent 4: N/A

Reagent 5: N/A

3. Hazard Identification

Primary Routes of Entry:
Inhalations, ingestion, skin and / or eye contact.

Inhalation:
Inhalation of mist may irritate respiratory tract.

Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Skin Contact:
May cause irritation.

Eye Contact:
Contact with eyes may cause severe irritation.
4. First Aid Measures

Inhalation:
If breathing becomes difficult, remove victim to fresh air. Seek medical attention immediately.

Ingestion:
Get medical attention if there has been ingestion of this product.

Skin Contact:
If this chemical comes in contact the skin, flush the area of skin with water. If clothing becomes wet or significantly contaminated, remove and replace clothing. Where there is evidence of skin irritation, get medical attention.

Eye Contact:
Immediately flush eye(s) with large volume of water for atleast 15 minutes, occasionally lifting the lower lids. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point (Method used): N/A
Flammable Limits – LEL: N/A UEL: N/A

Extinguishing Media:
Use fire-extinguishing media appropriate for site conditions.

Special Fire Procedures:
Structural firefighting gear and self-contained breathing apparatus will provide adequate protection if this product is in a fire area.

Unusual Fire and Explosion Hazards:
N/A.

6. Accidental Release Measures

Steps to be taken in case material is Released or Spilled:
Use an absorbent material to contain/ pick up the spilled solution. Place all contaminated disposable into a suitable container, seal, label, and hold for disposal.

7. Handling and Storage

Refer to packet insert for additional information on handling and storage procedures.

8. Exposure Controls and Personal Protection

Ventilation Data:
Supplemental ventilation is not required for the normal use of this product.

Respiratory Protection:
Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow OSHA respirator regulations (29CFR1910.134) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide worker protection for given working conditions, level of airborne concentration, and presence of sufficient oxygen.

Protective Gloves:
Wear appropriate protective gloves to prevent skin contact.
Other Protective Equipment:
Wear appropriate eye protection to prevent eye contact. Wear appropriate body protection to prevent skin contact.

Other Engineering Controls:
Eye wash stations and deluge showers.

Work Practices:
Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene. Avoid contact with eyes or skin. Do not place in mouth.

Hygienic Practices:
Do not eat, drink, or smoke while working with product. Upon completion of work activities involving this product, wash hands thoroughly with soap and water.

9. Physical And Chemical Properties
For All Components Unless Otherwise Indicated

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Relative Vapour density (air = 1)</td>
<td>N/A</td>
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<tr>
<td>Specific Gravity (water = 1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Vapour Pressure, mm Hg @ 20°C</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation rate (nBuAc = 1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Freezing / Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
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</tbody>
</table>

Odour and Appearance Information
Reagent 1: Clear, Colourless liquid
Reagent 2: N/A.
Reagent 3: N/A.
Reagent 4: N/A.
Reagent 5: N/A.

10. Stability and Reactivity

Incompatibility (Materials to Avoid):
Incompatible with strong oxidizers.

Hazardous Decomposition Products:
Thermal decomposition may produce carbon monoxide and carbon dioxide.

Will Hazardous Polymerization Occur?
Hazardous polymerization will not occur.

Conditions to Avoid / Polymerization: N/A.

Is the Product Stable?
Yes, under normal handling and storage conditions.

Conditions to Avoid/stability
Strong oxidants.

11. Toxicological Information

Toxicity Data:
N/A.

Reproductive effects:
N/A.
Target organ Effects:
Eyes, skin, mucous membranes.

Carcinogenicity: No

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>% W/V</th>
<th>NTP Carcinogen Known</th>
<th>Anticipated</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A.</td>
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12. Ecological Information

Environmental Fate / Stability:
N/A

Effect of Material on plants or animals:
N/A

Effect of Chemical on Aquatic Life:
N/A

13. Disposal Considerations

EPA Waste Number and Proper Waste Disposal Method:
Please consult local, state and federal regulations for additional guidance on disposal.

14. Transportation Information

Is this Material Hazardous? Not regulated under transportation regulations.

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>Hazard Class Number</th>
<th>Packing Group</th>
<th>UN Number</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
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</tbody>
</table>

15. Regulatory Information

NA.

16. Other Information

NA => NOT APPLICABLE or NO INFORMATION