SAFETY DATA SHEET

1. Identification of the Substance and Company

CIP 200
Acid Process and Research Cleaner

Product No. 1D20
MSDS No. 1D20
Prepared by: M. Ebers
asksteris_msds@steris.com

2. Hazards Identification

Hazardous Polymerization: Will not occur.

Incompatible Materials: Strong base and oxidizing agents, aluminum

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>% By Wt.</th>
<th>CAS No.</th>
<th>EU No.</th>
<th>Symbol</th>
<th>R Phrases</th>
<th>Oral LD₅₀</th>
<th>LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>30 - 60</td>
<td>7664-36-2</td>
<td>231-633-2</td>
<td>C</td>
<td>34</td>
<td>1,550 mg/kg (rat)</td>
<td>ND</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>3 - 7</td>
<td>77-92-9</td>
<td>201-009-1</td>
<td>[X]</td>
<td>[36/38]</td>
<td>11,700 mg/kg (rat)</td>
<td>ND</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eye Contact: Flush eyes immediately with water for at least 15 minutes. Get medical attention if irritation develops.

Skin Contact: Flush skin immediately with water for at least 15 minutes. Get medical attention.

Inhalation: None known.

Ingestion: None known.

5. Fire-Fighting Measures

Conditions of Flammability/Flash Point/Auto-ignition Temperature: Not flammable.

Upper Flammable Limit: NA
Lower Flammable Limit: NA

Special Hazards: Can react with soft metals to evolve flammable hydrogen gas.

Explosibility Data: ND

Special Fire Fighting Procedures: None known.

Hazard Combustion Products: CO, CO₂

6. Accidental Release Measures

Ensure suitable personal protection during removal of spillages. Spills should be contained and may be cautiously neutralized with sodium bicarbonate, or absorbed on appropriate material and placed in a container for disposal. Flush spill site with large quantities of water to a sanitary sewer. Washings should be prevented from entering surface water/storm drains. Local regulations should be observed.

7. Handling and Storage

7.1 Handling: For industrial use only. Avoid contact with eyes, skin, mouth. Wear appropriate protection. Wash hands and exposed skin after use.

7.2 Storage: Store in a cool, well ventilated area.

8. Exposure Control/Personal Protection

8.1 Occupational Exposure Limits

Phosphoric acid: ACGIH TLV and OSHA PEL = 1 mg/m³; ACGIH and OSHA STEL = 3 mg/m³; UK HSE EH40 STEL = 2 mg/m³

8.2 Personal Protection

Respirator Protection: If engineering controls are inadequate to maintain levels below established limits, an appropriate NIOSH approved respirator is required.

Eye Protection: Chemical splash goggles.

Other Protective Clothing and Equipment: Clothes sufficient to avoid contact.

Engineering Controls/Ventilation: Adequate to maintain air levels below established limits.

9. Physical and Chemical Properties

Solubility in Water: Complete
Specific Gravity: Approximately 1.34 g/ml
pH (1% solution): approximately 2.0
Physical State/Appearance/odor: Clear, slightly hazy, colorless liquid. Mild chemical odor.

10. Stability and Reactivity

Stability: Stable

Conditions to Avoid/Conditions of Reactivity: None known.

11. Toxicological Information

11.1 Acute (Primary Routes of Exposure)

Eyes (Irritancy): Causes irritation.

Skin (Irritancy or Sensitization): Causes severe irritation. Symptoms may be delayed.

Inhalation: Mists irritating to upper respiratory tract.

Ingestion: Irritating to mouth, throat and gastrointestinal tract.

11.2 Long Term Exposure: None known.

Carcinogenicity: IARC, NTP and OSHA do not list this product or its ingredients as carcinogens.

Reproductive Toxicity/Teratogenicity/Mutagenicity/Toxically Synergistic Products: ND

12. Ecological Information

The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

13. Disposal Considerations

Do not contaminate ponds, waterways, or ditches with chemical or used containers.

Empty containers should be rinsed thoroughly and discarded in an appropriate waste container. Containers may be harmful if swallowed. Causes skin and eye irritation. Corrosive to aluminum.

14. Transport Information

Ground: Phosphoric Acid Solution, 8, Corrosive, UN 1805, PG III

Road/Rail: ADR/RID Class: UN 1805, Phosphoric Acid Solution, 8, 17(c) ADR

Sea: IMDG Class: Phosphoric Acid Solution, 8, Corrosive, UN 1805, PG III

15. Regulatory Information

EU Regulations: This preparation is classified as dangerous as defined by the UK Chemicals (Hazard Information and Packaging for Supply) Regulations. These regulations implement a number of EC Directives including the Dangerous Substances Directive (67/548/EEC and amendments), the Dangerous Preparations Directive (88/379/EEC and amendments) and the Safety Data Sheets Directive (91/155/EEC and amendment).

EEC Classification: CORROSIVE

Hazard Symbol: C

Risk Phrases: R34: Causes burns.

Safety Phrases: S2: Keep out of reach of children. S24/25: Avoid contact with skin and eyes, S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S36/37/39: Wear suitable protective clothing, gloves and full eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WHMIS Classification: E- Corrosive Material (Corrosive to aluminum)

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 the Controlled Products Regulation.

16. Other Information

The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.

NA - Not Applicable  ND - No Data