Hydrogen Peroxide Sterilant (31%)

SAFETY DATA SHEET

1. Identification of the Substance and Company

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>EEC No.</th>
<th>CAS No.</th>
<th>% By Wt.</th>
<th>Symbol</th>
<th>R Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>251-765-0</td>
<td>7722-84-1</td>
<td>31</td>
<td>O, C</td>
<td>8, 34</td>
</tr>
</tbody>
</table>

3. Hazards Identification

4. First Aid Measures: Eye Contact: Flush eyes immediately with water for at least 15 minutes. Get medical attention.

5. Fire-Fighting Measures; Flash Point: Non-combustible

6. Accidental Release Measures: Ensure suitable personal protection during removal of spillages. Spills should be contained and may be cautiously neutralized with sodium metabisulfite or sodium sulfite (1.9 lbs SO2 to 500 mL peroxide), 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: Read and observe all labeled use instructions. 7.2 Storage: Store refrigerated and away from combustibles. Never return unused peroxide to original container. Utensils for handling peroxide should be made only of compatible materials such as glass, stainless steel, aluminum or plastic.

8. Exposure Control/Personal Protection: 8.1 Occupational Exposure Limits Hydrogen peroxide: ACGIH TLV and OSHA PEL = 1 ppm; UK HSE EH40 STEL = 2 ppm; IDLH = 75 ppm

8.2 Personal Protection Respirator Protection: If concentrations in excess of 10 ppm expected, use approved scba. Do not use oxidizable sorbants such as activated carbon.

Eye and Face Protection: Chemical splash goggles. Protective Gloves: Rubber, neoprene or vinyl

Other Protective Clothing and Equipment: Polyester or acrylic full cover clothing and rubber boots are recommended.

Ventilation: General or Local exhaust sufficient to control any release in excess of the threshold limits.

9. Physical and Chemical Properties

Solubility in Water: Complete

Appearance/Odor: Clear colorless liquid/odorless.

pH (as distributed): 0 – 3.5

Freezing Point: -15°F (-27°C)

10. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Incompatible Materials: Cyanides, hexavalent chromium compounds, nitric acid, potassium permanganate, oxidizers, reducers, combustible materials and flammable vapors.

Conditions to Avoid: Unstable with heat and contamination; liberation of oxygen gas may result in dangerous pressures.

11. Toxicological Information

11.1 Acute (Primary Routes of Exposure)

Eyes: Liquid is extremely irritating and corrosive. Causes burns; effects may be delayed. Permanent eye damage and blindness can result. Vapors and mists are extremely irritating.

Skin: Liquid causes skin irritation and may cause burns after prolonged exposure. Causes bleaching of skin and stinging sensation. Dermal LD50 (Rabbit) > 2000 mg/kg. Death after 24 hours exposure. Vapors and mists are extremely irritating.

Inhalation: Vapors cause severe irritation to the nose, throat and lungs. May result in coughing and shortness of breath. LC50 (Rat) (90% solution) > 2000 ppm.

Ingestion: Harmful if swallowed. Causes burns to the gastrointestinal tract. Oral LD50 (Male Rat) (35% Hydrogen Peroxide) = 1193 mg/kg

11.2 Long Term Exposure: None known.

Carcinogenicity: IARC, NTP and OSHA do not list this product or its ingredients as carcinogens. ACGIH lists hydrogen peroxide as an A3 animal carcinogen.

12. Ecological Information: None available.

13. Disposal Considerations: Empty cartridges should be rinsed with water before discarding. Unused material should be diluted with water (1:20) and flushed to a sanitary sewer, if in accordance with state, local and federal regulations. For additional guidance, contact the State Water Board or the Regional Office of the EPA.

14. Transport Information

Ground: Hydrogen peroxide aqueous solution, Oxidizer, Corrosive, 5.1, 8, PGI, UN2014
Road/Rail: ADR/RID Class: UN 2014, Hydrogen peroxide aqueous solution, Oxidizer, Corrosive, 5.1, 8, PGI, UN2014
Ship: IMDG Class: Hydrogen peroxide aqueous solution, Oxidizer, Corrosive, 5.1, 8, PGI, UN2014
Air: ICAO/IATA Class: Product containers are vented; therefore, product cannot be shipped by air.

15. Regulatory Information

EEC Classification: OXIDISING / CORROSIVE
Hazard Symbol: O / C
Risk Phrases: R8: Contact with combustible material may cause fire. R34: Causes burns.
Safety Phrases: S1/2: Keep locked up and out of reach of children. S3: Store in a cool place. S28: After contact with skin, wash immediately with plenty of water. S36/39: Wear suitable protective clothing and eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

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

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