



## SAFETY DATA SHEET

### 1. Identification of the Substance and Company

Resert™ XL HLD

Product No. 4450

MSDS No. 4450

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HMIS Rating:

HEALTH:	1
FLAMMABILITY:	0
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	B

Date Revised: NA

STERIS Corporation, P. O. Box 147, St. Louis, MO 63166, US  
 Emergency Telephone No. 1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)  
 Telephone Number for Information: 1-800-548-4873 (Customer Service-Healthcare Products)

STERIS Limited, STERIS House, Jays Close, Viablos, Basingstoke, Hampshire, RG22 4AX, UK  
 Emergency Phone No: +44 (0) 1895 622639 Product/Technical Information Phone No: +44 (0) 1256 840400

### 2. Hazards Identification

Mild Irritant to Eyes, Slight Irritant to Skin.

### 3. Composition/Information on Ingredients

Hazardous Component(s)	% By Wt.	CAS No.	EU No.	Symbol	R Phrases	Oral LD <sub>50</sub>	Inhalation LC <sub>50</sub>
Hydrogen Peroxide	1.4 – 2.3	7722-84-1	231-765-0	Xi	R36	1193 mg/kg (rat) at 35% solution	>0.17 mg/l (rat) at 50% solution
2-Furoic Acid	≤ 2.50	88-14-2	201-803-0	Xi	R36/38	1000 mg/kg (mouse)	ND

### 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 if irritation develops.

**Inhalation:** Remove patient to fresh air. If not breathing, give artificial respiration. Get medical attention.

**Ingestion:** Do not induce vomiting. Get medical attention. Do not give anything by mouth to an unconscious person. If conscious, drink a large quantity of milk or water.

### 5. Fire-Fighting Measures

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

**Upper Flammable Limit:** NA **Lower Flammable Limit:** NA

**Special Hazards:** Hydrogen peroxide will not burn but decomposition will generate oxygen that increases the explosive limits, enhances the burning rate and may initiate fire in combustion materials. May react with soft metals to evolve flammable hydrogen gas. Clothing and other combustible materials that have come into contact with hydrogen peroxide must be immediately and thoroughly washed with water. If hydrogen peroxide is allowed to dry in the materials, spontaneous combustion can occur and a fire may result.

**Explosibility Data:** ND

**Extinguishing Media:** Water or water fog, dry chemical, regular foam or carbon dioxide.

**Special Fire Fighting Procedures:** Firefighters should wear a self-contained breathing apparatus.

**Hazard Combustion Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

### 6. Accidental Release Measures

Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material and place in a chemical waste container. 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. Avoid contact with skin, eyes and clothing. Do not breathe vapors.

**7.2 Storage:** Keep away from children. Keep in a cool, dry place, away from heating sources.

### 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:** Where engineering controls are impractical to maintain concentrations below established limits (see Section 8.1), use NIOSH-approved respirator appropriate for conditions.

**Eye Protection:** Safety glasses or goggles.

**Protective Gloves:** Rubber, neoprene or vinyl.

**Other Protective Clothing and Equipment:** Wear appropriate protective clothing to minimize contact with skin.

**Engineering Controls/Ventilation:** Local exhaust ventilation recommended to maintain air concentrations below established limits (see Section 8.1).

### 9. Physical and Chemical Properties

**Solubility in Water:** complete **Specific Gravity:** 1.018 – 1.024

**Physical State/Appearance/Odor:** Clear, colorless to light straw, liquid **pH:** 2.2 – 2.6

**Odor Threshold, Vapor Pressure, Vapor Density, Evaporation Rate, Boiling Point and Freezing Point:** ND

**Coefficient of Water/Oil Distribution:** NA

### 10. Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Incompatible Materials:** reducing agents, combustibles, iron and other heavy metals, copper alloys and caustic

**Conditions to Avoid/Conditions of Reactivity:** Avoid direct sunlight and heat.

**Hazardous Decomposition or Byproducts:** CO, CO<sub>2</sub>, NO<sub>x</sub>

### 11. Toxicological Information

#### 11.1 Acute (Primary Routes of Exposure)

**Eyes (Irritancy):** Mild Irritant to the eyes.

**Skin (Irritancy or Sensitization):** Slight Irritant to the skin.

**Inhalation:** Not a route of exposure

**Ingestion:** For a similar formula, the Oral LD<sub>50</sub> (rat) > 2,000 mg/kg

#### 11.2 Long Term Exposure

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

ACGIH lists hydrogen peroxide as an A3 animal carcinogen.

**Reproductive Toxicity/Teratogenicity/Mutagenicity/Toxicologically Synergistic Products:** ND

### 12. Ecological Information: ND

### 13. Disposal Considerations

Product may be flushed to a sanitary sewer with copious amounts of water, 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

**Proper Ship Name:** Non-Hazardous

**Ground:** Non-Hazardous

**Sea:** IMDG Class: Non-Hazardous

**Air:** ICAO/IATA Class: Product containers are vented; therefore, this product cannot be shipped by air

### 15. Regulatory Information

**EEC Classification:** IRRITANT **Hazard Symbol:** Xi

**Risk Phrases:** R36/38: Irritating to eyes and skin.

**Safety Phrases:** S24/25: Avoid contact with eyes and skin. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28: After contact with skin, wash immediately with plenty of water S37/39: Wear suitable gloves and eye/face protection.

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 (1999/45/EEC and amendments) and the Safety Data Sheets Directive (91/155/EEC and amendment).

**USA State Regulations:** May contain trace levels of benzene and toluene.

### 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