SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Revital-Ox™ Resert™ High Level Disinfectant
Product code : 4455

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
Use of the substance/mixture : High Level Disinfectant for Semi-Critical Medical Devices

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

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

Supplier:
STERIS Australia Pty Ltd
9 Acro Lane
Heatherton VIC 3202
Australia
Telephone: +61 1300 211 422

Device Technologies New Zealand Limited
47 Arrenway Drive, Albany, Auckland, 0632
New Zealand
Tel: 0508 338 423, Fax: 649 9913 2009

1.4. Emergency telephone number

Emergency number : 1 800 429 551 (24 hours) Australia
0508 338 423 (New Zealand)
CHEMTREC International: 1-703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to NOHSC :

Hazardous Substance. Non-Dangerous Goods.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 2B H320

Adverse physicochemical, human health and environmental effects

No additional information available.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) : Not Applicable
Signal word (CLP) : Warning
Hazard statements (CLP) : H320 - Causes eye irritation.

Precautionary statements (CLP) : P264 - Wash thoroughly after handling.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Furancarboxylic acid	(CAS No) 88-14-2 (EC no) 201-803-0	2 - 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Hydrogen peroxide	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9	1 - 3	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412
Other Non-Hazardous Components	NA	Up to 100	NA

Full text of H-phrases: See section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove patient to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Seek medical attention immediately.

First-aid measures after skin contact : Immediately flush skin with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Give water to drink if victim completely conscious/alert. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Repeated or prolonged skin contact may cause irritation.

Symptoms/injuries after eye contact : Fine dispersion/spraying/misting: May cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Foam, carbon dioxide, dry chemical.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Contains 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. Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Contact with metallic substances may release flammable hydrogen gas.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Avoid contact with skin, eyes and clothing. Avoid breathing dust, mist or spray. Spilled material may present a slipping hazard. Ensure adequate air ventilation. Work in a well-ventilated area.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. Dispose in a safe manner in accordance with local/national regulations. Ensure all national/local regulations are observed.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Contain and/or absorb spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not absorb in sawdust, paper, cloth or other combustible absorbents. Collect all waste in suitable and labelled containers and dispose according to local legislation. Flush residue with large amounts of water. Do not allow to enter into surface water or drains. Ensure all national/local regulations are observed.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Product for industrial use only. Read label before use. Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour. For further information refer to Section 8: Exposure-controls/personal protection.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Separate working clothes from town clothes. Launder separately. Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : A washing facility/water for eye and skin cleaning purposes should be present. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapours below the recommended exposure limits.

Storage conditions : Keep out of reach of children. Keep only in original container. Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep out of direct sunlight.

Incompatible materials : Reducing agents. Iron. heavy metals. Copper alloys. Caustic products. Combustible materials.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen peroxide (7722-84-1)		
United Kingdom	WEL TWA (mg/m³)	1.4 mg/m³
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m³)	2.8 mg/m³
United Kingdom	WEL STEL (ppm)	2 ppm
USA - ACGIH	ACGIH TWA (ppm)	1 ppm
USA - IDLH	US IDLH (ppm)	75 ppm
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	1.4 mg/m³
USA - NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	1 ppm

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Provide adequate ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Protective clothing. Gloves. Protective goggles.

Hand protection : Gloves that are chemically resistant to the materials within this product should be worn. Examples of preferrred glove barrier materials include: butyl rubber, chlorinated polyethylene, natural rubber (latex), Neoprene, Nitrile / butadiene rubber, polyethylene, ethyl vinyl alcohol laminate, polyvinyl chloride or Viton. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection : Wear chemical goggles or safety glasses.

Skin and body protection	:	Wear suitable protective clothing.
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment.
Other information	:	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear
Colour	:	Colourless to light straw
Odour	:	No data available
Odour threshold	:	No data available
pH	:	2.2 - 2.6 Approximately
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	>160°F (ASTM D 92-05a (Cleveland Open Cup)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.022 g/ml Specific Gravity
Solubility	:	Water: Completely soluble
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

No additional information available.

10.5. Incompatible materials

Reducing agents. Iron. Heavy metals. Copper and its alloys. Caustic products. Combustible materials.

10.6. Hazardous decomposition products

Thermal decomposition generates: Fume. Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hydrogen peroxide (7722-84-1)	
LD50 oral rat	801 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	2 g/m³ (Exposure time: 4 h)
ATE CLP (oral)	801.000 mg/kg bodyweight
ATE CLP (dermal)	2000.000 mg/kg bodyweight
ATE CLP (gases)	4500.000 ppmv/4h
ATE CLP (vapours)	2.000 mg/l/4h
ATE CLP (dust,mist)	2.000 mg/l/4h

Skin corrosion/irritation	:	Dermal tox: LD_{50} > 5000 mg/kg. pH: 2.2 - 2.6 Approximately
Serious eye damage/irritation	:	May have the potential to be a mild irritant. pH: 2.2 - 2.6 Approximately
Respiratory or skin sensitisation	:	Not classified Based on available data, the classification criteria are not met.
Germ cell mutagenicity	:	Not classified Based on available data, the classification criteria are not met.
Carcinogenicity	:	Not classified Based on available data, the classification criteria are not met.
Reproductive toxicity	:	Not classified Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	:	Not classified Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	:	Not classified Based on available data, the classification criteria are not met.
Aspiration hazard	:	Not classified Based on available data, the classification criteria are not met.
Potential Adverse human health effects and symptoms	:	Not classified Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic Toxicity : LC50 > 750 mg/l

Hydrogen peroxide (7722-84-1)	
LC50 fishes 1	16.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	18 - 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	18 - 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

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Revital-Ox™ Resert™ High Level Disinfectant	
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) 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.

.2. Persistence and degradability

12.3. Bioaccumulative potential

Revital-Ox™ Resert™ High Level Disinfectant	
Bioaccumulative potential	Not established.

Hydrogen peroxide (7722-84-1)	
BCF fish 1	(no bioaccumulation)

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Other adverse effects

: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. Dispose in a safe manner in accordance with local/national regulations. Ensure all national/local regulations are observed.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Product containers are vented; therefore, this product cannot be shipped by air.

14.6.1. Overland transport

Non-hazardous.

14.6.2. Transport by sea

IMDG Class : Non-hazardous.

14.6.3. Air transport

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

14.6.4. Inland waterway transport

No additional information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. Australia

AICS Listed or Exempt. Hazard Category : Irritant

15.1.2. EU-Regulations

Contains no REACH candidate substance

Seveso Information :

15.1.3. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision Date : 3/28/2023

Sources of Key data : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

H271	May cause fire or explosion; strong oxidiser
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

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.