

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

1.1. Product identifier

Product form : Mixture
 Trade name : Spor-Klenz® RTU ETO Process Packaged Cold Sterilant
 Product code : 6528
 Product group : Trade product

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 : Hard Surface Antimicrobial

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: 1-800-444-9009 (Customer Service-Scientific Products)
 US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

Supplier:

STERIS Ireland Limited
 IDA Business and Technology Park
 Tullamore
 County Offaly
 R35 X865
 Ireland.
 Product/Technical Information Phone No: +44 (0) 116 276 8636
 Email: asksteris_msds@steris.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1895 622 639

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Corr. 1A H314

Full text of H-phrases: see section 16

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) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) :

P260 - Do not breathe mist, fume, spray, vapours
 P264 - Wash hands thoroughly after handling
 P280 - Wear protective gloves/protective clothing and eye/face protection
 P301+P330+P331 - If swallowed: Rinse mouth. Do NOT induce vomiting
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

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for breathing

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acetic acid	(CAS No) 64-19-7 (EC no) 200-580-7 (EC index no) 607-002-00-6 (REACH No) 01-2119475328-30-0119	< 10	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Hydrogen peroxide	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9	1	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Chronic 3, H412
Peroxyacetic acid substance with national workplace exposure limit(s) (CZ, FI)	(CAS No) 79-21-0 (EC no) 201-186-8 (EC index no) 607-094-00-8	0,08	Flam. Liq. 3, H226 Org. Perox. D, H242 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 1, H400

Full text of H- and EUH-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 to fresh air and keep at rest in a position comfortable for breathing. Immediately get medical attention
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention
First-aid measures after eye contact	: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. In all cases of doubt, or when symptoms persist, seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing
First-aid measures after ingestion	: Rinse mouth. Give water to drink if victim completely conscious/alert. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician

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

Symptoms/injuries	: Causes severe skin burns and eye damage
Symptoms/injuries after inhalation	: May cause minor irritation to the respiratory tract and to other mucous membranes. The following symptoms may occur: Runny nose. Sore throat. Coughing, sneezes
Symptoms/injuries after skin contact	: Severe skin irritant. Effects of skin contact may include: irritation and burning feeling
Symptoms/injuries after eye contact	: Causes serious eye damage. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness
Symptoms/injuries after ingestion	: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Bleeding of the gastrointestinal tract

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	: Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand
Unsuitable extinguishing media	: Do not use a heavy water stream

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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition generates : Fume. Carbon monoxide. Carbon dioxide

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment
Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus
Other information : Do not mix with: chlorinated products as this could liberate toxic corrosive chlorine gas

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not breathe fumes, vapors. Avoid contact with skin, eyes and clothes

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing. Wear protective gloves and eye/face protection. Boots
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection
Emergency procedures : Ventilate area

6.2. Environmental precautions

Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Leftovers: neutralize with sodium bicarbonate. Neutralise with dry sodium carbonate

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 : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe gas, fumes, vapour or spray. Avoid contact during pregnancy/while nursing. Keep container tightly closed to avoid moisture absorption and contamination
Hygiene measures : Wash hands thoroughly after handling. Take care for general good hygiene and housekeeping

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. A washing facility/water for eye and skin cleaning purposes should be present. Provide adequate ventilation
Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use. Keep out of reach of children
Incompatible materials : heavy metals. copper, bronze, brass. Copper alloys. Iron. Aluminium. Salts. Alkalis and caustic products. Organic compounds. Formaldehyde. Chlorine
Storage temperature : < 24 °C (< 75°F)
Heat and ignition sources : Store away from excessive heat . Remove all sources of ignition
Storage area : Store in dry, cool, well-ventilated area
Special rules on packaging : Correctly labelled

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)		
USA IDLH	US IDLH (ppm)	75 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1,4 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1,4 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm
United Kingdom	WEL TWA (mg/m ³)	1,4 mg/m ³

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Hydrogen peroxide (7722-84-1)		
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m ³)	2,8 mg/m ³
United Kingdom	WEL STEL (ppm)	2 ppm
Acetic acid (64-19-7)		
USA IDLH	US IDLH (ppm)	50 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	25 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	37 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Peroxyacetic acid (79-21-0)		
USA ACGIH	ACGIH STEL (ppm)	0.4 ppm (inhalable fraction and vapor)

8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure 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. The following pictograms represent the minimum requirements for personal protective equipment: protective clothing, protective clothing, protective clothing, Gloves, Protective goggles, Protective goggles



- Hand protection : Wear protective gloves, rubber or nitrile gloves
- Eye protection : Chemical goggles or face shield
- Skin and body protection : Wear suitable protective clothing. Rubber apron, boots
- Respiratory protection : Work in well-ventilated zones or use proper respiratory protection. Wear approved mask
- Other information : When using, do not eat, drink or smoke

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- (a) Physical state : Liquid
- (b) Colour : Colourless
- (c) Odour : Acidic. Characteristic
- (d) Melting point/ Freezing point : No data available
- (e) Boiling point : No data available
- (f) Flammability (solid, gas) : Non flammable
- (g) Lower and upper explosion limit : No data available
- (h) Flash point : No data available
- (i) Auto-ignition temperature : No data available
- (j) Decomposition temperature : No data available
- (k) pH : 1.5 - 2
- (l) Kinematic viscosity : No data available
- (m) Solubility : Water: completely soluble
- (n) Partition coefficient n-octanol/water (log value) : No data available
- (o) Vapour pressure : No data available
- (p) Density : ca. 1,01 Specific Gravity
- (q) Relative vapour density at 20 °C : No data available
- (r) Particle Character : No data available
- (q) Relative vapour density at 20 °C : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Viscosity, dynamic : No data available
- Log Pow : No data available
- Log Kow : No data available

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Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours

10.2. Chemical stability

Stable under normal conditions of use. Recommended storage temperature

10.3. Possibility of hazardous reactions

Not established

10.4. Conditions to avoid

Store in a cool dry place. Keep storage temperature below 75 °F (24 °C). Take any precaution to avoid mixing with combustibles

10.5. Incompatible materials

Strong acid. Strong bases. Heavy metals. Iron. Copper and its alloys. Brass. Aluminium. Caustic products. Combustible organic materials. Alkalis. Chlorine. Formaldehyde

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapours

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Not classified

Spor-Klenz® RTU ETO Process Packaged Cold Sterilant	
LD50 oral	> 5000 mg/kg
LD50 dermal rat	> 20000 mg/kg

Hydrogen peroxide (7722-84-1)	
LD50 oral rat	801 mg/kg
LD50 dermal rat	4060 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	2 g/m ³ (Exposure time: 4 h)
ATE (oral)	801,000 mg/kg bodyweight
ATE (dermal)	2000,000 mg/kg bodyweight

Acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg
LD50 dermal rabbit	1060 µl/kg
LC50 inhalation rat (mg/l)	11,4 mg/l/4h

Peroxyacetic acid (79-21-0)	
LD50 oral rat	263 mg/kg
LD50 dermal rabbit	1410 µl/kg
LC50 inhalation rat (mg/l)	0,3 mg/l (Exposure time: 1 h)
ATE (oral)	263,000 mg/kg bodyweight
ATE (dermal)	1100,000 mg/kg bodyweight
ATE (dust,mist)	0,300 mg/l/4h

Skin corrosion/irritation	:	Causes severe skin burns and eye damage pH: 1,5 - 2
Serious eye damage/irritation	:	Eye damage, category 1, implicit Causes severe skin burns and eye damage pH: 1,5 - 2
Respiratory or skin sensitisation	:	Not classified Based on available data, the classification criteria are not met

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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	: Based on available data, the classification criteria are not met

11.2.1 Endocrine disrupting properties

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic organisms. Bird toxicity (reproduction). Toxic to fish. Toxic to invertebrates (Daphnia)

Hydrogen peroxide (7722-84-1)	
LC50 fishes 1	16,4 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	7,7 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	2,5 mg/l (Exposure time: 72 h - Species: Chlorella vulgaris)
LC50 fish 2	18 - 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [Static])
EC50 Daphnia 2	18 - 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Acetic acid (64-19-7)	
LC50 fishes 1	79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [Static])
EC50 Daphnia 1	47 mg/l (Exposure time: 24 h - Species: Daphnia magna)
LC50 fish 2	75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [Static])
EC50 Daphnia 2	65 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

Spor-Klenz® RTU ETO Process Packaged Cold Sterilant	
Persistence and degradability	Not established

12.3. Bioaccumulative potential

Spor-Klenz® RTU ETO Process Packaged Cold Sterilant	
Bioaccumulative potential	Not established

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

Acetic acid (64-19-7)	
Log Pow	-0,31 (at 20 °C)

Peroxyacetic acid (79-21-0)	
BCF fish 1	(not bioaccumulative, rapid degradation)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

: Avoid release to the environment

12.7. Other adverse effects

No additional information available

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According to amending Regulation (EC) No. 1907/2006 (REACH)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations
- Additional information : Empty containers should be thoroughly rinsed with large quantities of clean water. Dispose of empty containers and wastes safely. Dispose in a safe manner in accordance with local/national regulations
- Ecology - waste materials : Avoid release to the environment

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

Not regulated for transport.

14.1. UN number

Not applicable

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

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air 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. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. 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 : 11/4/2022

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. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — AcuteHazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3

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Flam. Liq. 3	Flammable liquids, Category 3
Org. Perox. D	Organic Peroxides, Type D
Ox. Liq. 1	Oxidising Liquids, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
STOT SE 3	Specific target organ toxicity (single exposure), Category 3
H226	Flammable liquid and vapour
H242	Heating may cause a fire
H271	May cause fire or explosion; strong oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

SDS EU (REACH Annex II)

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.