

ACTRIL® Cold Sterilant**Safety Data Sheet**

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name : ACTRIL Cold Sterilant
 Product code : 78399-509/ 78400-309/ 78399-510

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

Use of the substance/mixture : Sterilization, Disinfection, and Sanitization of Medical Equipment

1.3. Details of the supplier of the safety data sheet

Medivators Inc.
 14605 28th Avenue North
 Minneapolis, MN 55447 - USA
 T 1-800-328-3340

1.4. Emergency telephone number

Emergency number : 1-800-424-9300

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GHS-US classification**

Skin irritation 2
 Serious eye damage 1

2.2. Label elements**GHS-US labelling**

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
 Hazard statements (GHS-US) : Causes skin irritation. Causes serious eye damage.
 Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

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	%	GHS-US classification
Acetic acid	(CAS No) 64-19-7	5.2	Flam. Liq. 3 Acute Tox. 4 (Dermal) Skin Corr. 1A
Hydrogen peroxide	(CAS No) 7722-84-1	1.0	Ox. Liq. 1 Acute Tox. 4 (Oral) Acute Tox. 4 (Inhalation) Skin Corr. 1A

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures**4.1. Description of first aid measures**

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

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- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops or persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

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

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Use appropriate personal protection equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container.

6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetic acid (64-19-7)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	15 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³

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Acetic acid (64-19-7)		
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Hydrogen peroxide (7722-84-1)		
ACGIH	ACGIH TWA (ppm)	1 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	1.4 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1 ppm

8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Appearance	: Clear
Colour	: Colourless
Odour	: Acidic
Odour threshold	: No data available
pH	: 1.5 – 2.0
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: ≈ 110 °C (230 °F)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.01
Solubility	: No data available
Log Pow	: No data available
Log Kow	: 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 dangerous reaction known under conditions of normal use.

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10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Not classified.

ACTRIL Cold Sterilant	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 20 mg/l/4h

Acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg
LD50 dermal rabbit	1060 mg/kg
LC50 inhalation rat	11.4 mg/l/4h

Hydrogen peroxide (7722-84-1)	
LD50 oral rat	801 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat	2 g/m ³ /4h

Skin corrosion/irritation : Causes skin irritation (on basis of test data).
 Serious eye damage/irritation : Causes serious eye damage.
 Respiratory or skin sensitisation : Based on available data, the classification criteria are not met.
 Germ cell mutagenicity : Based on available data, the classification criteria are not met.
 Carcinogenicity : Based on available data, the classification criteria are not met.

Hydrogen peroxide (7722-84-1)	
IARC group	3 - Not classifiable

Reproductive toxicity : Based on available data, the classification criteria are not met.
 Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.
 Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.
 Aspiration hazard : Based on available data, the classification criteria are not met.
 Symptoms/injuries after inhalation : May cause respiratory tract irritation.
 Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
 Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
 Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information**12.1. Toxicity**

Ecology - general : Not considered to be harmful to aquatic life.

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

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

12.2. Persistence and degradability

ACTRIL Cold Sterilant	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

ACTRIL Cold Sterilant	
Bioaccumulative potential	Not established.

Acetic acid (64-19-7)	
Log Pow	-0.31 (at 20 °C)

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

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not regulated for transport.

14.2. UN proper shipping name

Not applicable.

14.3. Additional information

Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information**15.1. US Federal regulations**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.3. US State regulations

ACTRIL Cold Sterilant	
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Indication of changes	: None.
Date of issue	: 11/11/2014
Other information	: None.

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