Safety Data Sheet

Sarety Data Sneet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012		
SECTION 1: Identification of the subs	tance/mixture and of the company/undertaking	
1.1. Product identifier		
Product name	: MINNCARE [®] Cold Sterilant MINNCARE [®] Liquid Disinfectant	
Product code	: 176-01-001,176-01-002,176-01-003,78399-646,78399-647,78399-648 78325-400,78325-150,78325-300	
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against	
Use of the substance/mixture	: Sanitizing of RO water systems	
1.3. Details of the supplier of the safety da	ata 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 – 1	This label is regulated by the EPA under FIFRA. Refer to Section 15.	
2.1. Classification of the substance or mix	(ture	
GHS-US classification Oxidizing liquid 1 Organic peroxide G Corrosive to metals 1 Acute toxicity 4 (Inhalation) Skin corrosion 1A Serious eye damage 1 Specific target organ toxicity - Single exposure 3		
2.2. Label elements		
GHS-US labelling Hazard pictograms (GHS-US)		
Signal word (CHS LIS)	GHS03 GHS05 GHS07	
Signal word (GHS-US) Hazard statements (GHS-US)	 Danger May cause fire or explosion; strong oxidizer. May be corrosive to metals. Causes severe skin burns and eye damage. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness 	
Precautionary statements (GHS-US)	 Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles (metals, oxidizing materials, alkalis, caustics, chlorine, formaldehyde, salts, flammable organics). Keep only in original container. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Absorb spillage to prevent material damage. If on skin (or hair): Rinse skin with water/shower. If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. Store in corrosive resistant container with a resistant inner liner. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. 	
2.3. Other hazards		
No additional information available.		
SECTION 3: Composition/information	on ingredients	

3.1. Substance

Not applicable.

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3.2. Mixture			
Name	Product identifier	%	GHS-US classification
Hydrogen peroxide	(CAS No) 7722-84-1	22	Ox. Liq. 1 Acute Tox. 4 (Oral) Acute Tox. 4 (Inhalation) Skin Corr. 1A
Acetic acid	(CAS No) 64-19-7	9	Flam. Liq. 3 Acute Tox. 4 (Dermal) Skin Corr. 1A
Peroxyacetic acid	(CAS No) 79-21-0	4.5	Flam. Liq. 3 Org. Perox. D Acute Tox. 2 (Inhalation) Acute Tox. 4 (Oral) Acute Tox. 4 (Dermal) Skin Corr. 1A STOT SE 3
Stabilizer	Proprietary	1	Eye Dam. 1 Met. Corr. 1

* The specific chemical identity and 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 inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical advice/attention.
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. Get immediate medical advice/attention.
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 immediate medical advice/attention.
First-aid measures after ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
4.2. Most important symptoms and effects	s, both acute and delayed
Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes severe skin burns. Symptoms may include redness, pain, blisters.
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. May cause burns.
Symptoms/injuries after ingestion	 May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns to the linings of the mouth, throat, and gastrointestinal tract.

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

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	: Water spray, dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media	: Do not use water jet.
5.2. Special hazards arising from the subs	stance or mixture
Fire hazard	 Products of combustion may include, and are not limited to: oxides of carbon, oxygen. Danger of developing toxic pyrolyse products.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. This material increases the risk of fire and may aid combustion.
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). Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures			
6.1.	Personal precautions, protective equipment and emergency procedures		
Genera	l measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny en unnecessary and unprotected personnel. Remove ignition sources.	try to
6.2.	Methods and material for containme	nt and cleaning up	
For con	tainment	: In case of accidental spillage, contain the spill and neutralize it with sodium bicarbonate of sodium carbonate. Use appropriate personal protection equipment (PPE).	or
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Methods for cleaning up

: Scoop up material and place in a disposal container. Absorb spillage to prevent material damage. Provide ventilation. Do not reuse the liquid material.

6.3. **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	
Additional hazards when processed	: May be corrosive to metals.
Precautions for safe handling	Keep away from sources of ignition. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. Use only outdoors or in a well-ventilated area. When using do not eat, drink or smoke. Never return unused material to original container.
Hygiene measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2. Conditions for safe storage, includ	ling any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	Keep out of the reach of children. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Store away from other materials. Floor needs a protective coating against acid. Store at temperatures not exceeding 23.9 °C (75 °F). Protect from sunlight. Store locked up.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1.

Hydrogen peroxide (7722-84-1)		
ACGIH	ACGIH TWA (ppm)	1 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1 ppm
Acetic acid (64-19-7)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	15 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	25 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Peroxyacetic acid (79-21-0)		
ACGIH	ACGIH STEL (ppm)	0.4 ppm (inhalable fraction and vapor)
OSHA	Not applicable	
Stabilizer (Proprietary)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls	
Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
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. Wear solvent resistant apron and boots for spills.
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.
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SECTION 9: Physical and chemical		
9.1. Information on basic physical and	chemical properties	
Physical state	: Liquid	
Appearance	: Clear	
Color	: Colorless	
Odor	: Acid	
Odor threshold	: No data available	
рН	: 0.8 +/- 3	
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	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Not flammable	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: 1.09 - 1.14	
Solubility	: No data available	
Partition coefficient: n-octanol/water	: 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	: Strong oxidizer	
Explosive limits	: No data available	
SADT	: >60°C	
9.2. Other information		
No additional information available.		
SECTION 10: Stability and reactivit	y	
10.1. Reactivity	ther meterial generally by violding evygen. May be corrective to metale	
	ther material generally by yielding oxygen. May be corrosive to metals.	
10.2. Chemical stability		
Stable under normal storage conditions. Decor	nposes slowly to release oxygen.	
10.3. Possibility of hazardous reactions		
No dangerous reaction known under conditions	s of normal use.	
10.4. Conditions to avoid		
Heat. Sources of ignition. Incompatible materia	ls.	
10.5. Incompatible materials		
Metals. Oxidizing materials. Alkalis. Caustics. Chlorine. Formaldehyde. Salts. Flammable organics.		
10.6. Hazardous decomposition products		
May include, and are not limited to: oxides of carbon, oxygen. Do not mix with chlorinated products as this could liberate toxic corrosive chlorine gas.		
SECTION 11: Toxicological informa	ition	
11.1. Information on toxicological effect		
Acute toxicity	: Harmful if inhaled.	
MINNCARE Cold Sterilant		
LD50 oral rat	> 2000 mg/kg	
LD50 damed rehbit	> 2000 mg/kg	

LD50 dermal rabbit

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> 2000 mg/kg

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MINNCARE Cold Sterilant	
LC50 inhalation rat	>2.0 but ≤10.0 mg/l (Calculated using ATE values)
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	2 g/m ³ /4 h
Acetic acid (64-19-7)	· ·
LD50 oral rat	3310 mg/kg
LD50 dermal rabbit	1060 mg/kg
Peroxyacetic acid (79-21-0)	· · · ·
LD50 oral rat	1540 mg/kg
LD50 dermal rabbit	1410 µl/kg
LC50 inhalation mouse	0.524 mg/l4/h
Stabilizer (Proprietary)	
LD50 oral rat	2400 mg/kg
LD50 dermal rabbit	> 7940 mg/kg
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: 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)	: May cause respiratory irritation.
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	: Harmful if inhaled. May cause respiratory irritation. May cause drowsiness and dizziness.
Symptoms/injuries after skin contact	: Causes severe skin burns. Symptoms may include redness, pain, blisters.
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. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns to the linings of the mouth, throat, and gastrointestinal tract.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Not considered to be harmful to aquatic life.
12.2. Persistence and degradability	
No additional information available.	
12.3. Bioaccumulative potential	
MINNCARE Cold Sterilant	
Bioaccumulative potential	Not established.

No additional	information	available.
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Mobility in soil

12.4.

12.5. Other adverse effects

Effect on the global warming

: No known ecological damage caused by this product.

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SECTION 13: Disposal consideration	S
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.	
UN-No.(DOT)	: UN3149
Proper Shipping Name (DOT)	: Hydrogen peroxide and peroxyacetic acid mixtures, stabilized
Department of Transportation (DOT) Hazard Classes	: 5.1 (8)
Hazard labels (DOT)	
Packing group (DOT)	: 11
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 exclu (TSCA) inventory.	ded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act
EPA FIFRA Pesticide Product Notice	This chemical is a pesticide registered by the United StatesEnvironmental Proection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and ahzard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard informationrequired on the pesticide label is reproducted below. The pesticide label also includes other important information, including directions for use.
EPA FIFRA Signal Word	Danger
EPA FIFRA Hazard Statement	Keep Out of Reach of Children
EPA FIFRA Precautionary Statements	Hazard to Humans and Domestic Animals
Hydrogen peroxide (7722-84-1)	
Listed on the United States SARA Section 302	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 (concentration >52%)
Peroxyacetic acid (79-21-0)	
Listed on the United States SARA Section 302 Listed on United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	500
SARA Section 313 - Emission Reporting	1.0 %
15.2. US State regulations	
MINNCARE 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	

SECTION 16: Other information Date of issue

Other information

: 02/19/2015 : None.

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