



1-Stroke Environ[®] Germicidal Detergent

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 12/01/2014 Version: 1.0

SECTION 1: Identification

1.1. Product Identifier

Product Form: Mixture
Product Name: 1-Stroke Environ[®]
Germicidal Detergent
Product Code: 5397

1.2. Intended Use of the Product

Use of the substance/mixture: For professional use only. Germicidal Detergent.

1.3. Name, Address, and Telephone of the Responsible Party

Company
STERIS Corporation
Official Mailing Address:
P.O. Box 147
St. Louis, MO 63166 USA

Street Address:
7501 Page Avenue
St. Louis, MO 63133 USA

Telephone Number for Information: 1-800-444-7909 (Customer Service – Scientific Products)

web: www.steris.com

email: asksteris_msds@steris.com

1.4. Emergency Telephone Number

Emergency Number : 1-314-535-1395 or CHEMTREC: 1-800-424-9300

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1	H290
Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317

2.2. Label elements – This label is regulated by the EPA under FIFRA. Refer to Section 15.

GHS-US Labeling

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US) :

Danger

Hazard Statements (GHS-US) :

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.

Precautionary Statements (GHS-US) :

P234 - Keep only in original container.
P260 - Do not breathe mist, spray, vapors.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable 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.
P310 - Immediately call a POISON CENTER or doctor.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Other Hazards: May be corrosive to respiratory tract.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

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SECTION 3: Composition/information On Ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C10-16-alkyl ethers, sodium salts	(CAS No) 68585-34-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
2-Phenylphenol	(CAS No) 90-43-7	7 - 13	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
o-Benzyl-p-chlorophenol	(CAS No) 120-32-1	5 - 10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium hydroxide	(CAS No) 1310-73-2	0.5 - 1.5 1 - 5	Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
2,4-Pentanediol, 2-methyl-	(CAS No) 107-41-5	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Isopropyl alcohol	(CAS No) 67-63-0	1 - 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
4-tert-Pentylphenol	(CAS No) 80-46-6	1 - 5	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
1,2-Propylene glycol	(CAS No) 57-55-6	1 - 5	Not classified

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: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

First-aid Measures After Ingestion: Rinse mouth. 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. May cause an allergic reaction in sensitive individuals. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Causes severe skin burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media: Powder, alcohol-resistant foam, water spray, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive, however in contact with incompatibilities may release explosive hydrogen gas.

Reactivity: Hazardous reactions will not occur under normal conditions.

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5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decomposition. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides. Thermal decomposition generates corrosive vapors.

Other information: May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Ventilate area. Stop leak if safe to do so.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. Collect absorbed material and place into a sealed, labelled container for proper disposal. Dispose in a safe manner in accordance with local/national regulations.

6.4. Reference to Other Sections

See Section 8: Exposure Controls and Personal Protection.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Do not breathe mist, spray, or vapors. Use appropriate personal protective equipment when handling and observe good personal hygiene measures after handling.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container. Do not store on side, avoid creasing or impacting of side walls. If frozen, thaw and remix before use. Store locked up. Storage areas should be periodically checked for corrosion and integrity.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers. Amines. Acid anhydrides. Aluminum. Metals.

Packaging materials: Store in original container.

7.3. Specific End Use(s)

For professional use only. Germicidal Detergent.

SECTION 8: Exposure Controls/personal Protection

8.1. Control Parameters

Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C10-16-alkyl ethers, sodium salts (68585-34-2)		
USA ACGIH	TLV	Not applicable
USA OSHA	PEL	Not applicable
USA NIOSH	REL	Not applicable
USA NIOSH	IDLH	Not applicable
2-Phenylphenol (90-43-7)		
USA ACGIH	TLV	Not applicable
USA OSHA	PEL	Not applicable
USA NIOSH	REL	Not applicable
USA NIOSH	IDLH	Not applicable
o-Benzyl-p-chlorophenol (120-32-1)		
USA ACGIH	TLV	Not applicable
USA OSHA	PEL	Not applicable
USA NIOSH	REL	Not applicable
USA NIOSH	IDLH	Not applicable
Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³

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USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
Alberta	OEL Ceiling (mg/m ³)	2 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	2 mg/m ³
Manitoba	OEL Ceiling (mg/m ³)	2 mg/m ³
New Brunswick	OEL Ceiling (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	2 mg/m ³
Nova Scotia	OEL Ceiling (mg/m ³)	2 mg/m ³
Nunavut	OEL Ceiling (mg/m ³)	2 mg/m ³
Northwest Territories	OEL Ceiling (mg/m ³)	2 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL Ceiling (mg/m ³)	2 mg/m ³
Québec	PLAFOND (mg/m ³)	2 mg/m ³
Saskatchewan	OEL Ceiling (mg/m ³)	2 mg/m ³
Yukon	OEL Ceiling (mg/m ³)	2 mg/m ³
2,4-Pentandiol, 2-methyl- (107-41-5)		
USA ACGIH	ACGIH Ceiling (ppm)	25 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	125 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	25 ppm
Alberta	OEL Ceiling (mg/m ³)	121 mg/m ³
Alberta	OEL Ceiling (ppm)	25 ppm
British Columbia	OEL Ceiling (ppm)	25 ppm
Manitoba	OEL Ceiling (ppm)	25 ppm
New Brunswick	OEL Ceiling (mg/m ³)	121 mg/m ³
New Brunswick	OEL Ceiling (ppm)	25 ppm
Newfoundland & Labrador	OEL Ceiling (ppm)	25 ppm
Nova Scotia	OEL Ceiling (ppm)	25 ppm
Nunavut	OEL Ceiling (mg/m ³)	120 mg/m ³
Nunavut	OEL Ceiling (ppm)	25 ppm
Northwest Territories	OEL Ceiling (mg/m ³)	120 mg/m ³
Northwest Territories	OEL Ceiling (ppm)	25 ppm
Ontario	OEL Ceiling (ppm)	25 ppm
Prince Edward Island	OEL Ceiling (ppm)	25 ppm
Québec	PLAFOND (mg/m ³)	121 mg/m ³
Québec	PLAFOND (ppm)	25 ppm
Saskatchewan	OEL Ceiling (ppm)	25 ppm
Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	980 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
Alberta	OEL STEL (mg/m ³)	984 mg/m ³
Alberta	OEL STEL (ppm)	400 ppm
Alberta	OEL TWA (mg/m ³)	492 mg/m ³
Alberta	OEL TWA (ppm)	200 ppm
British Columbia	OEL STEL (ppm)	400 ppm
British Columbia	OEL TWA (ppm)	200 ppm
Manitoba	OEL STEL (ppm)	400 ppm
Manitoba	OEL TWA (ppm)	200 ppm
New Brunswick	OEL STEL (mg/m ³)	1230 mg/m ³
New Brunswick	OEL STEL (ppm)	500 ppm
New Brunswick	OEL TWA (mg/m ³)	983 mg/m ³
New Brunswick	OEL TWA (ppm)	400 ppm
Newfoundland & Labrador	OEL STEL (ppm)	400 ppm
Newfoundland & Labrador	OEL TWA (ppm)	200 ppm

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Nova Scotia	OEL STEL (ppm)	400 ppm
Nova Scotia	OEL TWA (ppm)	200 ppm
Nunavut	OEL STEL (mg/m ³)	1228 mg/m ³
Nunavut	OEL STEL (ppm)	500 ppm
Nunavut	OEL TWA (mg/m ³)	983 mg/m ³
Nunavut	OEL TWA (ppm)	400 ppm
Northwest Territories	OEL STEL (mg/m ³)	1228 mg/m ³
Northwest Territories	OEL STEL (ppm)	500 ppm
Northwest Territories	OEL TWA (mg/m ³)	983 mg/m ³
Northwest Territories	OEL TWA (ppm)	400 ppm
Ontario	OEL STEL (ppm)	400 ppm
Ontario	OEL TWA (ppm)	200 ppm
Prince Edward Island	OEL STEL (ppm)	400 ppm
Prince Edward Island	OEL TWA (ppm)	200 ppm
Québec	VECD (mg/m ³)	1230 mg/m ³
Québec	VECD (ppm)	500 ppm
Québec	VEMP (mg/m ³)	985 mg/m ³
Québec	VEMP (ppm)	400 ppm
Saskatchewan	OEL STEL (ppm)	400 ppm
Saskatchewan	OEL TWA (ppm)	200 ppm
Yukon	OEL STEL (mg/m ³)	1225 mg/m ³
Yukon	OEL STEL (ppm)	500 ppm
Yukon	OEL TWA (mg/m ³)	980 mg/m ³
Yukon	OEL TWA (ppm)	400 ppm
4-tert-Pentylphenol (80-46-6)		
USA ACGIH	TLV	Not applicable
USA OSHA	PEL	Not applicable
USA NIOSH	REL	Not applicable
USA NIOSH	IDLH	Not applicable
1,2-Propylene glycol (57-55-6)		
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present-aerosol only) 155 mg/m ³ (aerosol and vapor)
Ontario	OEL TWA (ppm)	50 ppm (aerosol 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, especially in confined areas. Ensure all national/local regulations are observed.
- Personal Protective Equipment : Face shield. Gloves. Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection.



- Materials for Protective Clothing : Chemically resistant materials and fabrics.
- Hand Protection : Wear chemically resistant protective gloves.
- Eye Protection : Chemical safety goggles.
- Skin and Body Protection : Wear suitable protective clothing.
- Respiratory Protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
- Consumer Exposure Controls : 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 : Brown liquid
- Odor : Pleasant
- Odor Threshold : No data available
- pH : 12.6 (neat) ((1:256): 10.4)
- Evaporation rate : No data available
- Melting Point : No data available
- Freezing Point : No data available
- Boiling Point : No data available
- Flash Point : No data available

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Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Specific Gravity	: 1.08 (water=1)
Solubility	: Complete in water
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

9.2. Other Information

VOC content : < 3 %

SECTION 10: Stability And Reactivity

10.1 Reactivity:

Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability:

Stable under normal conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4 Conditions to Avoid:

Direct sunlight. Extremely high or low temperatures. Incompatible materials.

10.5 Incompatible Materials:

Strong acids. Strong oxidizers. Amines. Acid anhydrides. Aluminum. Metals. May be corrosive to metals.

10.6 Hazardous Decomposition Products:

Hydrogen. Thermal decomposition generates : Carbon oxides, Nitrogen oxides, Corrosive vapors. May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Sodium hydroxide (1310-73-2)	
LD50 Dermal Rabbit	1350 mg/kg
4-tert-Pentylphenol (80-46-6)	
LD50 Oral Rat	> 2000 mg/kg
2,4-Pentanediol, 2-methyl- (107-41-5)	
LD50 Oral Rat	3692 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	310 mg/m ³ (Exposure time: 1 h)
2-Phenylphenol (90-43-7)	
LD50 Oral Rat	2733 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 0.949 mg/l (Exposure time: 1 h)
o-Benzyl-p-chlorophenol (120-32-1)	
LD50 Oral Rat	1700 mg/kg
Isopropyl alcohol (67-63-0)	
LD50 Oral Rat	4710 mg/kg
LD50 Dermal Rabbit	4059 mg/kg
LC50 Inhalation Rat	72600 mg/m ³ (Exposure time: 4 h)
1,2-Propylene glycol (57-55-6)	
LD50 Oral Rat	20000 mg/kg
LD50 Dermal Rabbit	20800 mg/kg

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. pH: 12.6 (neat) ((1:256): 10.4)

Serious Eye Damage/Irritation: Causes serious eye damage. pH: 12.6 (neat) ((1:256): 10.4)

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: No data available

Carcinogenicity: Not classified

2-Phenylphenol (90-43-7)	
IARC group	3

o-Benzyl-p-chlorophenol (120-32-1)	
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National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.
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Isopropyl alcohol (67-63-0)

IARC group	3
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Reproductive Toxicity: Not classified
 Specific Target Organ Toxicity (Single Exposure): Not classified
 Specific Target Organ Toxicity (Repeated Exposure): Not classified
 Aspiration Hazard: Not classified
 Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.
 Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Causes severe skin burns.
 Symptoms/Injuries After Eye Contact: Causes serious eye damage.
 Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
 Chronic Symptoms: None expected under normal conditions of use.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General : No information available.

Sodium hydroxide (1310-73-2)

LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l

4-tert-Pentylphenol (80-46-6)

LC50 Fish 1	1.87 - 3.34 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	2.7 mg/l (Daphnia magna)
LC 50 Fish 2	1.6 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)
ErC50 (algae)	4.2 mg/l (Exposure time: 96h - Species: Pseudokirchneriella subcapitata)
NOEC chronic fish	0.1 mg/l

2,4-Pentanediol, 2-methyl- (107-41-5)

LC50 Fish 1	10500 - 11000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	2700 - 3700 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

2-Phenylphenol (90-43-7)

LC50 Fish 1	3.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	1 - 2.5 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	2.74 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 (algae)	3.57 mg/l (Exposure time: 72h - Species: Selenastrum capricornutum)
NOEC chronic fish	0.036 mg/l
NOEC chronic algae	0.468 mg/l (Species: Selenastrum capricornutum)

o-Benzyl-p-chlorophenol (120-32-1)

LC50 Fish 1	0.72 ppm (Exposure time: 96 h - Species: Oncorhynchus mykiss (Rainbow trout))
EC50 Daphnia 1	0.59 ppm (Exposure time: 48 h - Species: Daphnia magna (Water flea)

Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C10-16-alkyl ethers, sodium salts (68585-34-2)

EC50 Daphnia 1	3.43 g/l (Exposure time: 48 h - Species: Ceriodaphnia dubia (Water flea))
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Isopropyl alcohol (67-63-0)

LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC 50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)

1,2-Propylene glycol (57-55-6)

LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and Degradability

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Persistence and Degradability	Not established.
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12.3. Bioaccumulative Potential

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Bioaccumulative Potential	Not established.
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2,4-Pentanediol, 2-methyl- (107-41-5)

Log Pow	< 0.14
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2-Phenylphenol (90-43-7)

Log Pow	3.18
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Isopropyl alcohol (67-63-0)

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Log Pow	0.05 (at 25 °C)
1,2-Propylene glycol (57-55-6)	
BCF fish 1	< 1

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not flush into surface water or sewer system. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations. This germicide, its solutions or rinsings from empty containers should be disposed of in a toilet or service sink served by a sanitary sewer or in a landfill approved for pesticides.

Container disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

SECTION 14: Transport Information

14.4 In Accordance with TDG

Proper Shipping Name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (o-phenylphenol and o-benzyl-p-chlorophenol)
Packing Group : III
Hazard Class : 8
Identification Number : UN1903
Label Codes : 8
Marine Pollutant (TDG) : Marine pollutant



In Accordance With ICAO/IATA/IMDG/DOT

14.1. UN Number

UN-No.(DOT) : 1903
DOT NA no. : UN1903

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Disinfectants, liquid, corrosive n.o.s.
(o-phenylphenol and o-benzyl-p-chlorophenol)
Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard Labels (DOT) : 8 - Corrosive



DOT Symbols : G - Identifies PSN requiring a technical name
Packing Group (DOT) : III

14.3. Additional Information

Emergency Response Guide (ERG) Number : 153

Transport by Sea

DOT Vessel Stowage Location : UN1903
disinfectant, liquid, corrosive, n.o.s.
(o-phenylphenol and o-benzyl-p-chlorophenol)
III

Packing Group (DOT)

Air Transport

: UN1903
disinfectant, liquid, corrosive, n.o.s.
(o-phenylphenol and o-benzyl-p-chlorophenol)
(4 x 1 gal. package not approved for air shipment)
III

Packing Group (DOT)

1-Stroke Environ[®] Germicidal Detergent

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SECTION 15: Regulatory Information

15.1 US Federal Regulations

1-Stroke Environ[®] Germicidal Detergent	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
EPA FIFRA Pesticide Product Notice	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
EPA FIFRA Signal Word	Danger
EPA FIFRA Hazard Statements	Keep out of reach of children.
EPA FIFRA Precautionary Statements	HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS.
Sodium hydroxide (1310-73-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
4-tert-Pentylphenol (80-46-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
2,4-Pentanediol, 2-methyl- (107-41-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
2-Phenylphenol (90-43-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
o-Benzyl-p-chlorophenol (120-32-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C10-16-alkyl ethers, sodium salts (68585-34-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier notification)
1,2-Propylene glycol (57-55-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

15.2 US State Regulations

2-Phenylphenol (90-43-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Sodium hydroxide (1310-73-2)	
RTK - U.S. - Massachusetts - Right To Know List	
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
4-tert-Pentylphenol (80-46-6)	
RTK - U.S. - Massachusetts - Right To Know List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
2,4-Pentanediol, 2-methyl- (107-41-5)	
RTK - U.S. - Massachusetts - Right To Know List	
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
2-Phenylphenol (90-43-7)	
RTK - U.S. - Massachusetts - Right To Know List	
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	
Isopropyl alcohol (67-63-0)	
RTK - U.S. - Massachusetts - Right To Know List	
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
RTK - U.S. - Pennsylvania - RTK (Right to Know) List	

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1,2-Propylene glycol (57-55-6)

RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

1-Stroke Environ[®] Germicidal Detergent

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Health Canada	Danger. Corrosive.

Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material

4-tert-Pentylphenol (80-46-6)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	

2,4-Pentanediol, 2-methyl- (107-41-5)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

2-Phenylphenol (90-43-7)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

o-Benzyl-p-chlorophenol (120-32-1)

Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C10-16-alkyl ethers, sodium salts (68585-34-2)

Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Isopropyl alcohol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

1,2-Propylene glycol (57-55-6)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: Other Information, Including Date Of Preparation Or Last Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A

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Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 2	Flammable liquids Category 2
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard

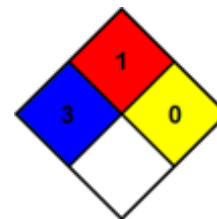
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA Fire Hazard

: 1 - Must be preheated before ignition can occur.

NFPA Reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Party Responsible for the Preparation of This Document

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS NA, WHMIS,GHS