Material Safety Data Sheet

Issuing Date 03-Sep-2008 **Revision Date** **Revision Number** 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **Sterilex Ultra Disinfectant Cleaner Solution 1**

UN-No UN1760

Recommended Use Disinfecting solution.

EPA Registration Number 63761-8

Supplier Address
Sterilex Corporation
11409 Cronhill Drive, Suite L
Owings Mills, MD 21117

Telephone: 1-800-511-1659

Company Emergency Phone Number 1-800-255-3924

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Corrosive
Harmful by inhalation, in contact with skin and if swallowed
The product causes burns of eyes, skin and mucous membranes
Mist or aerosol may be irritating to eyes, nose, throat, and lungs

Appearance Clear, colorless solution **Physical State** Liquid **Odor** Odorless

Potential Health Effects

Principle Routes of Exposure Skin contact, Eye contact.

Acute Toxicity

Eyes Causes burns. Corrosive to the eyes and may cause irreversible eye damage.

Skin Corrosive to skin. Causes burns.

Inhalation Harmful by inhalation. Inhalation in high concentration may cause irritation of respiratory system.

Ingestion Harmful if swallowed. Ingestion causes burns of the upper digestive and respiratory tract. Can burn mouth, throat, and stomach.

Chronic Effects Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risks of irreversible effects.

Aggravated Medical Conditions Preexisting eye disorders. Skin disorders. Respiratory disorders.

Environmental Hazard See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Water	7732-18-5	85.06 - 90.33
Hydrogen peroxide	7722-84-1	5.99 - 6.62
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0	2.85 - 3.15
Alkylbenzyldimethylammonium chloride	68391-01-5	2.85 -3.15

4. FIRST AID MEASURES

General Advice Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.

Eye Contact Call a poison control center or doctor for treatment advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Call a poison control center or doctor for treatment advice. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move victim to fresh air. Call a physician or Poison Control Center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion Call a physician or Poison Control Center. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.

Notes to Physician Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable Properties Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May decompose to form oxygen and oxides of carbon and/or nitrogen.

Flash Point Not combustible.

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Move containers from fire area if you can do it without risk. Dike fire control water for later disposal; do not scatter the material.

Hazardous Combustion Products Carbon monoxide, Carbon dioxide (CO_2), Hydrogen chloride, On decomposition product releases oxygen which may intensify fire.

Explosion Data
Sensitivity to Mechanical Impact No data available.
Sensitivity to Static Discharge No data available.

Specific Hazards Arising from the Chemical The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health Hazard** 3	**Flammability** 0	**Stability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazard** 3*	**Flammability** 0	**Physical Hazard** 0	**Personal Protection** -

**Indicates a chronic health hazard.*

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Use personal protective equipment. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Prevent product from entering drains.

Other Information Refer to protective measures listed in Sections 7 and 8. Combustible materials exposed to hydrogen peroxide should be thoroughly rinsed to remove all hydrogen peroxide.

7. HANDLING AND STORAGE

Handling Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. If spilled, take caution, as material can cause surfaces to become very slippery.

Storage Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Keep container tightly closed. Keep out of the reach of children. Keep in properly labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and Body Protection Rubber or neoprene footwear. Impervious clothing materials such as rubber, neoprene, nitrile or polyvinyl chloride. Wear liquid proof rubber or neoprene gloves.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless solution.	**Odor**	Odorless.
Odor Threshold	No information available	**Physical State**	Liquid
pH	3.01-5.86		
Flash Point	Not combustible.	**Autoignition Temperature**	Not combustible
Decomposition Temperature	No information available	**Boiling Point/Range**	>100°C / >212°F
Melting Point/Range	Not applicable		
Flammability Limits in Air	Not applicable	**Explosion Limits**	Not applicable
Specific Gravity	1.00-1.03	**Water Solubility**	Completely soluble
Solubility	Not applicable	**Evaporation Rate**	No information available
Vapor Pressure	No data available	**Vapor Density**	No data available
VOC Content	Not applicable		

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products Caustic. Iron and heavy metals. Copper alloys, galvanized iron. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Conditions to Avoid Extremes of temperature and direct sunlight.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen chloride. Oxygen which supports combustion.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information The below results are based on testing performed on representative samples of a mixture similar to this product. Harmful by inhalation, in contact with skin and if swallowed.

Irritation Corrosive to eyes Corrosive to skin Primary Irritation Index (PII) = 6.9 (rabbit)

LD50 Oral VALUE (mg/kg) 5,100 mg/kg (rat)
LD50 Dermal VALUE Not performed.
LC50 Inhalation (VAPOR) VALUE Not performed.

Chronic Toxicity

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risks of irreversible effects.

Target Organ Effects Eyes, Respiratory system, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Hydrogen peroxide	EC50 = 2.5 mg/L 72 h	LC50= 16.4 mg/L Pimephales promelas 96 h		EC50 = 7.7 mg/L 24 h

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper disposal of waste product.

Contaminated Packaging Do not re-use empty containers. Dispose of in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Hydrogen peroxide	Toxic; Corrosive; Ignitable; Reactive

14. TRANSPORT INFORMATION

Note This corrosive material, as per 49 CFR §173.154 and when the product meets the packaging requirements of 49 CFR §173.154 (b)(2) [inner packagings not over 5.0 L (1.3 gallons) net capacity each for liquid] is excepted from labeling and placarding requirements so long as the material is not offered for transport by aircraft.

DOT

Proper Shipping Name	Corrosive liquids, n.o.s.
Hazard Class	8
UN-No	UN1760
Packing Group	III
Description	UN1760, Corrosive liquids, n.o.s. (Quaternary ammonium compounds), 8, PG III
Emergency Response Guide Number	154

TDG

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
UN-No	UN1760
Packing Group	III
Description	UN1760, CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds), 8, PG III

MEX

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
UN-No	UN1760
Packing Group	III
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, III

ICAO

UN-No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	III
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, PG III

IATA

UN-No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	III
ERG Code	8L
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, PG III

IMDG/IMO

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Subsidiary Class	+
UN-No	UN1760
Packing Group	III
EmS No.	F-A, S-B
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8(+), PG III

RID

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
UN-No	UN1760

Packing Group	III
Classification Code	C9
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, III, RID
ADR/RID-Labels	8

ADR

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
UN-No	UN1760
Packing Group	III
Classification Code	C9
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, III

ADN

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	III
Classification Code	C9
Special Provisions	274
Description	UN1760, Corrosive liquid, n.o.s. (Quaternary ammonium compounds), 8, III
Hazard Labels	8
Limited Quantity	LQ7

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Does not comply
EINECS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Does not comply

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen peroxide	X	X	X	X
Benzyl chloride	100 lb			X

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Hydrogen peroxide		1000 lb
Benzyl chloride	100 lb	100 lb

U.S. State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Benzyl chloride	100-44-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrogen peroxide	X	X	X		X
Benzyl chloride	X	X	X	X	X

International Regulations

Mexico - Grade Serious risk, Grade 3

Chemical Name	Carcinogen Status	Exposure Limits
Hydrogen peroxide	A3	Mexico: TWA= 1.5 mg/m^3 Mexico: TWA= 1 ppm Mexico: STEL= 2 ppm Mexico: STEL= 3 mg/m^3
Benzyl chloride	A3	Mexico: TWA= 1 ppm Mexico: TWA= 5 mg/m^3

Canada

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

WHMIS Hazard Class
E Corrosive material

Chemical Name	NPRI
Benzyl chloride	X

Legend
X - Listed
NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Issuing Date 02-Sep-2008

Revision Date

Revision Note No information available

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet