

# STERIPLEX™ SD+ Mixed Solution

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 10/17/2016 Original Date of Issue: 8 / 2 5 /2016

Version: 4.0

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Solution

**Product Name:** STERIPLEX™ SD+ Mixed part A and part B solution

#### 1.2. Intended Use of the Product

STERIPLEX™ SD+ is a two-part system and when Part A and Part B are combined, creates an effective, intermediate-level Sporicide, Tuberculocide, Bactericide, and Virucide.

#### 1.3. Supplier Information

sBioMed. LLC

1272 so. 1380 West

Orem, Utah 84058

801-922-1111

[www.steriplex.com](http://www.steriplex.com)

#### 1.4. Emergency Telephone Number

**Emergency Number :** Poison Center: 800-222-1222

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

Flam. Liq. 3

#### 2.2. Label Elements

**GHS-US Labeling**

**Hazard Pictograms (GHS-US)**



**Signal Word (GHS-US)**

: Warning

**Hazard Statements (GHS-US)**

: Flammable Liquid

**Precautionary Statements (GHS-US)**

: Keep away from Flames and hot surfaces.

In case of fire: Use appropriate media (see section 5) to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local, regional, national, provincial, territorial and international regulations.

Keep away from heat /open flames/hot surfaces. No smoking.

#### 2.3 Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixture

Name	Product Identifier	% (w/w)
Water	(CAS No) 7732-18-5	69.146
Ethyl alcohol	(CAS No) 64-17-5	30.0
Hydrogen peroxide	(CAS No) 7722-84-1	0.31
Peroxyacetic acid	(CAS No) 79-21-0	0.25
Acetic acid	(CAS No) 64-19-7	0.19
Silver	(CAS No) 7440-22-4	0.03
Inert Food Grade Ingredients	(CAS No) Proprietary	0.074

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### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**Inhalation:** No special measures required. Treat symptomatically.

**Skin Contact:** No known effect after skin contact. Rinse with water if irritation develops or persists.

**Eye Contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes and then continue rinsing. Call poison control center or physician for advice.

**Ingestion:** Rinse Mouth. Get medical attention if you feel unwell.

#### 4.2. Most Important Symptoms and Effects both Acute and Delayed

**Inhalation:** None expected under normal conditions of use.

**Skin Contact:** None expected under normal conditions of use.

**Eye Contact:** Slight eye irritation can occur, see first aid measures for treatment.

**Ingestion:** None expected under normal conditions of use.

**Chronic Symptoms:** None expected under normal conditions of use

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

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>), dry chemical powder.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Flammable liquid.

**Explosion Hazard:** None expected under normal conditions of use.

**Reactivity:** Reacts with strong oxidizers. Increased risk of fire.

#### 5.3. Advice for Firefighters

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

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Use appropriate personal protection equipment (PPE) as required for clean-up.

##### 6.1.1. For Non-Emergency Personnel

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

##### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equipment cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

#### 6.2. Environmental Precautions

**General:** Avoid large amounts of spilled product and runoff with soil and surface waterways.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Follow facility's spill procedures.

**Methods for Cleaning Up:** Use a water rinse for final clean up.

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### SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water.

#### 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. Store away from direct sunlight, and incompatible materials.

**Incompatible Materials:** Strong oxidizers.

#### 7.3. Specific End Use(s)

STERIPLEX™ SD+ Mixed solution is an effective, intermediate-level Sporicide, Tuberculocide, Bactericide, and Virucide.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL).

Silver (7440-22-4)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (dust and fume)
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	0.01 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.01 mg/m <sup>3</sup> (dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust)
Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
Hydrogen peroxide (7722-84-1)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	75 ppm
Peroxyacetic acid (79-21-0)		
USA ACGIH	ACGIH STEL (ppm)	0.4 ppm (inhalable fraction and vapor)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Acetic acid (64-19-7)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	37 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA IDLH	US IDLH (ppm)	50 ppm

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### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** No protective equipment is needed under normal conditions of use.

**Hand Protection:** No protective equipment is needed under normal conditions of use.

**Eye Protect:** No protective equipment is needed under normal conditions of use.

**Skin and Body Protection:** No protective equipment is needed under normal conditions of use.

**Respiratory Protection:** Respirator is not needed under normal conditions of use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance (Color 22C)	: Colorless
Odor	: Slight Mint
pH	: 3.9
Flash Point	: 30 °C (86 °F)(ASTM D93)
Oxidation/Reduction	: Strong reductant not compatible with oxidizing agents
Specific Gravity	: 0.98

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Reacts with strong oxidizers.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Conditions to Avoid:** Direct sunlight. Open flames, Ignition sources. Incompatible materials.
- 10.4. **Incompatible Materials:** Strong oxidizers.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity: Oral** Category 5

**Acute Toxicity: Dermal Toxicity** Category 5

**Acute Toxicity: Eye Irritation** Category 2B, wear protective eye wear. If in eyes, rinse cautiously with water, remove contacts if present and continue rinsing.

**Acute Toxicity: Inhalation** Category 5

### 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

<b>Silver (7440-22-4)</b>	
LD50 Oral Rat	> 2000 mg/kg
<b>Ethyl alcohol (64-17-5)</b>	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat	124.7 mg/l/4h
<b>Hydrogen peroxide (7722-84-1)</b>	
LD50 Oral Rat	1193 mg/kg (Species: Sprague-Dawley; Exposure time: 4 h)
LD50 Dermal Rat	4060 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	(Exposure time: 4 h)
ATE US (dust, mist)	1.50 mg/l/4h
<b>Peroxyacetic acid (79-21-0)</b>	
LD50 Oral Rat	1540 mg/kg

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LD50 Dermal Rabbit	1410 µl/kg
ATE US (gases)	4,500.00 ppmV/4h
ATE US (vapors)	11.00 mg/l/4h
ATE US (dust, mist)	1.50 mg/l/4h
Acetic acid (64-19-7)	
LD50 Oral Rat	3310 mg/kg
Ethyl alcohol (64-17-5)	
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Hydrogen peroxide (7722-84-1)	
IARC Group	3

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>Silver (7440-22-4)</b>	
LC50 Fish 1	0.00155 - 0.00293 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	0.00024 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.0062 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
NOEC chronic fish	390 ng/l (Exposure time: 28d - Species: Pimephales promelas)
<b>Ethyl alcohol (64-17-5)</b>	
LC50 Fish 1	12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>Hydrogen peroxide (7722-84-1)</b>	
LC50 Fish 1	16.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	18 - 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	18 - 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
<b>Acetic acid (64-19-7)</b>	
LC50 Fish 1	79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	65 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

**Eco toxicity** – Harmful to aquatic life

**Other adverse effects** – No known significant effects or critical hazards

### 12.2. Persistence and Degradability

<b>Ethyl alcohol (64-17-5)</b>	
Persistence and Degradability	Not established.

### 12.3. Bio accumulative Potential

<b>Ethyl alcohol (64-17-5)</b>	
Log Pow	-0.32
Bio accumulative Potential	Not established.
<b>Hydrogen peroxide (7722-84-1)</b>	
BCF Fish 1	(no bioaccumulation)
<b>Peroxyacetic acid (79-21-0)</b>	
BCF Fish 1	(not bioaccumulative, rapid degradation)
<b>Acetic acid (64-19-7)</b>	
Log Pow	-0.31 (at 20 °C)

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### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional and national regulations.

### SECTION 14: TRANSPORT INFORMATION

In accordance with CFR 49 173.150, transportation labeling is not required when product inner packaging is not over 5.0 L (1.3 ga) net capacity each for liquid, and packed in a strong outer packaging. This exemption does not apply for transportation by aircraft.

### SECTION 15: REGULATORY INFORMATION

#### 15.1. US Federal Regulations

<b>STERIPLEX™ SD+ Mixed Solution</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Fire hazard
<b>Silver (7440-22-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
<b>RQ (Reportable Quantity, Section 304 of EPA's List of Lists):</b>	1000 lb < 100 um CERCLA/SARA RQ CHANGE TITLE
<b>SARA Section 313 - Emission Reporting</b>	1.0 %
<b>Ethyl alcohol (64-17-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Hydrogen peroxide (7722-84-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302	
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	1000 (concentration >52%)
<b>Peroxyacetic acid (79-21-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Listed on United States SARA Section 313	
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	500
<b>SARA Section 313 - Emission Reporting</b>	1.0 %
<b>Acetic acid (64-19-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>SARA Section 311/312 Hazard Classes</b>	Fire hazard Immediate (acute) health hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

#### 15.2. US State Regulations

##### Silver (7440-22-4)

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

##### Ethyl alcohol (64-17-5)

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

##### Hydrogen peroxide (7722-84-1)

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

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### Peroxyacetic acid (79-21-0)

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

### Acetic acid (64-19-7)

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

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

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 10/6/2016  
**Other Information** : This document has been prepared in accordance with the SD+S requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

<b>HMIS</b>	<b>Health Hazard</b>	<b>0</b>	<b>Flammability</b>	<b>2</b>	<b>Physical Hazard</b>	<b>0</b>
<b>NFPA</b>	<b>Health Hazard</b>	<b>0</b>	<b>Flammability</b>	<b>2</b>	<b>Physical Hazard</b>	<b>0</b>

### Party Responsible for the Preparation of This Document

sBioMed LLC  
801-922-1111

#### LIMITED WARRANTY AND DISCLAIMER

*NOTICE: sBioMed, LLC ("sBioMed") warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use. To the extent consistent with applicable law, the buyer assumes all risks of use and handling which is a variance in any way with the directions herein. Except as warranted by this label, sBioMed or the seller makes no other express or implied warranty of fitness or merchantability. To the extent consistent with applicable law, in no case shall sBioMed or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. sBioMed and the seller offer this product and the buyer and user accept it, subject to the foregoing Limited Warranty and Disclaimer which may be varied only by agreement in writing, signed by a duly authorized representative of sBioMed.*

North America GHS US 2012 & WHM