STERIPLEX SD

# MATERIAL SAFETY DATA SHEET (ACTIVATED)

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** STERIPLEX® SD Activated Formula

**GENERAL USE:** STERIPLEX® SD is a two-part system and when Part A and Part B are combined, create an effective *C. diff* Sporicide, Broad Spectrum Disinfectant, Sanitizer, Cleaner, Deodorizer, and DNA Decontaminant.

**MANUFACTURER:** SBIOMED LLC, 1272 South 1380 West, Orem, UT 84058, PHONE: 1 (888) 234-6142

**DATE REVISED:** 05-03-2012
This version replaces all previous versions.

**EMERGENCY TELEPHONE NUMBERS**
Poison Center call: (800) 222-1222

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

The combined ingredients of this product at their given percentages are not considered hazardous to your health.

| Chemical Name | CAS# | Wt.% |
|---|---|---|
| **Silver (Elemental)** | 7440-22-4 | 0.015 |
| **Ethanol** | 64-17-5 | 10.000 |
| **Hydrogen Peroxide** | 7722-84-1 | 0.020 |
| **Peroxyacetic Acid** | 79-21-0 | 0.150 |
| **Acetic Acid** | 64-19-7 | 0.150 |
| **Inert Food Grade Ingredients** | Proprietary | 0.075 |
| **Water** | 7732-18-5 | 89.590 |

**STERIPLEX SD's Patented Peroxyacetic Acid Conversion Process**

STERIPLEX SD's patented, two-part formulation causes rapid and significant changes to the traditionally aggressive chemical characteristics of the peroxyacetic acid or "PAA" upon Activation which occurs by simply combining Part B (the "PAA" activator component) with Part A. Specifically:

- The hydrogen peroxide ($H_2O_2$) component of the PAA is rapidly converted into water and oxygen within minutes of Activation, and ceases to exist with zero VOC emission; and
- The dramatically altered chemical form of the PAA post-Activation, is
  - Non-corrosive to the skin and eyes, which qualifies the STERIPLEX SD post-Activated formula for a remarkable health and safety rating of '0' (HMIS = 0) that exhibits no oral or inhalation toxicities, and only mild irritation when sprayed directly into the eyes (no permanent damage to the eyes) as validated in STERIPLEX Activated Formula's EPA-registration toxicity studies; and is
  - Non-oxidizing to materials and is safe for direct application on stainless steels, plastics and polymers exhibiting excellent inhibition corrosion rates as validated in the STERIPLEX Activated Formula's independent materials compatibility corrosion studies.
- STERIPLEX SD's Activated Formula is:
  - Non-Corrosive
  - Non-Fuming, Non-Toxic to Inhale
  - Not a Skin Irritant or Sensitizer

STERIPLEX SD is effective and for use as directed on hard, non-porous surfaces: stainless steel including titanium-coated and medical grade stainless steel, chrome, plastic (vinyl, LD and HD polyethylene, and polypropylene), silicone rubber, metal, Formica, medical tubing, vinyl rubber, laminated surfaces, glass, acrylic plastic, Plexiglas®, sealed fiberglass, glazed ceramic, glazed enamel, glazed porcelain, Corian®, sealed granite, sealed limestone, sealed marble, sealed slate, sealed stone, sealed terra cotta, sealed terrazzo, and sealed finished woodwork.

STERIPLEX SD is effective and for use as directed on hard, non-porous, water sensitive equipment surfaces: instruments, sealed electronics, computer keyboards, cell phones, telephones, appliances, remote controls, light switch covers and other hard, non-porous water sensitive equipment and surfaces listed on this label

In limited situations on certain surfaces and generally only if STERIPLEX SD is applied in excess or if there is repeated oversaturation/application of the product, a light food grade residual may occur over time. If this should occur, wipe with a wet cloth or towel to remove.

**3. PHYSICAL AND CHEMICAL PROPERTIES**

- **SCENT:** Mild
- **APPEARANCE:** Clear
- **BOILING POINT:** 86°C (187°F) at 630 mm Hg
- **DENSITY / WEIGHT PER VOLUME:** 1.044 g/ml or 8.7 lbs/gal
- **EVAPORATION RATE:** Above 1 (Butyl Acetate = 1)
- **OXIDIZING PROPERTIES:** None
- **pH:** 4.5
- **SOLUBILITY IN WATER:** (% by wt. @ 25°C / 77°F): 100
- **SPECIFIC GRAVITY:** (H2O=1): 1.06 @ 20°C
- **FREEZE POINT:** -8°C (17.6°F)

**4. TOXICOLOGICAL INFORMATION**

- **TARGET ORGANS:** Eyes, skin, nose, throat, lungs
- **EYE EFFECTS:** Moderate, temporary eye irritation
- **SKIN EFFECTS:** Non-irritating
- **DERMAL LD50:** No mortalities or abnormalities > 5000 mg/kg
- **ORAL LD50:** No mortalities or abnormalities > 5000 mg/kg
- **INHALATION LC50:** Inhalation toxicity > 2.01 mg/L
- **CARCINOGENICITY:** No carcinogenic effect in rats or mice.

- **HMIS**

Health 0 Flammability 0 Physical Hazard 0 Personal Protection (PPE) A
Protection = A (Safety glasses)
HMIS = Hazardous Materials Identification System Degree of Hazard Code:
4 = Severe 3 = Serious 2 = Moderate 1 = Slight 0 = Minimal

**5. FIRST AID MEASURES**

- **EYES:** 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 a poison control center or physician for treatment advice.

## 6. FIRE FIGHTING MEASURES

- **FLAMMABLE LIMITS:** Not available
- **SENSITIVITY TO IMPACT:** Not available
- **SENSITIVITY TO STATIC DISCHARGE:** Not available

### FIRE FIGHTING INFORMATION

- **Suitable extinguishing media:** Use media appropriate for the surrounding fire.
- **Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

- **NFPA**

Health 0 Flammability 0 Reactivity 0
NFPA = National Fire Protection Association
Degree of Hazard Code:
4 = Extreme 3 = High 2 = Moderate 1 = Slight 0 = Insignificant

## 7. ACCIDENTAL RELEASE MEASURES

- **RELEASE NOTES:** Control run off and isolate discharged material for proper disposal.

## 8. HANDLING AND STORAGE

- **HANDLING:** Special ventilation not required.
- **STORAGE:** Store in a dry, cool area and away from direct sunlight. Do not double stack pallets. Use first in, first out storage system.

## 9. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **EXPOSURE LIMITS**

| Chemical Name | ACGIH TLV | OSHA PEL | ACGIH STEL | ACGIH TWA |
|---|---|---|---|---|
| Silver (Elemental) | .1 mg/m³ | .01 mg/m³ | – | .1 mg/m³ |
| Acetic Acid | 10 ppm | 10 ppm | 15 ppm | 10 ppm |
| Ethanol | 1000 ppm | 1000 ppm | 1000 ppm | 1000 ppm |
| Hydrogen Peroxide | 1 ppm | 1 ppm | – | 1 ppm |

## 10. PERSONAL PROTECTIVE EQUIPMENT

- **EYES AND FACE:** Protective eyewear is recommended.
- **RESPIRATORY:** When used as directed, respiratory protection is not required.
- **PROTECTIVE CLOTHING:** Not required.
- **GLOVES:** Not required.

## 11. STABILITY AND REACTIVITY

- **STABILITY:** Stable
- **HAZARDOUS POLYMERIZATION:** Will not occur
- **HAZARDOUS DECOMPOSITION PRODUCTS:** None

## 12. ECOLOGICAL INFORMATION

- **ECOTOXICOLOGICAL INFORMATION:** This product decomposes naturally. Peracetic acid is completely miscible with water. Aqueous solutions of peracetic acid hydrolyze to acetic acid and hydrogen peroxide. When this product contacts soil the peracetic acid and hydrogen peroxide are completely decomposed to water, acetic acid and oxygen within 20 minutes. This decomposition is accelerated by the naturally occurring transition metal components in the soil.

## 13. DISPOSAL CONSIDERATIONS

- **DISPOSAL METHOD:** Discharge into a suitable treatment system in accordance with local, state and federal governmental agencies.

## 14. TRANSPORT INFORMATION

- **U.S. DEPARTMENT OF TRANSPORTATION (DOT)**
- **Domestic (Land, D.O.T.)**
- **Proper Shipping Name:** Not regulated (not classified as a Dangerous Goods material)
- **Hazard Class:** Not applicable
- **UN/NA:** Not applicable
- **Packing Group:** Not applicable

- **International (Water, I.M.O.)**
- **Proper Shipping Name:** Not regulated (not classified as a Dangerous Goods material)
- **Hazard Class:** Not applicable
- **UN/NA:** Not applicable
- **Packing Group:** Not applicable
- **International (Air, I.C.A.O.)**
- **Proper Shipping Name:** Not regulated (not classified as a Dangerous Goods material)
- **Hazard Class:** Not applicable
- **UN/NA:** Not applicable
- **Packing Group:** Not applicable

## 15. REGULATORY INFORMATION

**International Inventory Status:**

| Ingredient | CAS# | Europe (EINECS/ELINCS) | Canada (DSL) | Australia (AICS) | Japan (MITI) | Korea (TCCL) | Philippines (PICCS) | China (IECSC) | New Zealand (NZIoC) |
|---|---|---|---|---|---|---|---|---|---|
| **Silver** | 7440-22-4 | YES | YES | YES | NO | YES | YES | YES | YES |
| **Hydrogen Peroxide** | 7722-84-1 | YES | YES | YES | YES | YES | YES | YES | YES |
| **Peroxyacetic Acid** | 79-21-0 | YES | YES | YES | YES | YES | YES | YES | YES |
| **Acetic Acid** | 64-19-7 | YES | YES | YES | YES | YES | YES | YES | YES |
| **Ethanol** | 64-17-5 | YES | YES | YES | YES | YES | YES | YES | YES |

**United States**

| Ingredient | CAS# | OSHA | CAA | CWA | RCRA | SARA 302 | SARA 313 | TSCA |
|---|---|---|---|---|---|---|---|---|
| **Hydrogen Peroxide** | 7722-84-1 | YES | NO | NO | NO | NO | NO | NO |
| **Peroxyacetic Acid** | 79-21-0 | YES | YES | NO | NO | YES | YES | NO |
| **Acetic Acid** | 64-19-7 | YES | NO | YES | NO | NO | NO | NO |
| **Ethanol** | 64-17-5 | YES | NO | NO | NO | NO | NO | YES |
| **Water** | 7732-18-5 | YES | NO | NO | NO | NO | NO | YES |

## 16. Further information

Data for the production of the safety data sheet from the studies available and from the literature. Further information about the characteristics of the product can be found in the product code of practice or in the product brochure .

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.