SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: BioProtect 500
Revision Date: January 2, 2018

Chemical Description: Organosilane Antimicrobial

Distributor: ViaClean Technologies LLC
230 S. Broad Street
Philadelphia, PA 19102
877-447-5956

Emergency: (24hr) 800-535-5053 (Infobrac)

SECTION 2: HAZARDS IDENTIFICATION/EMERGENCY OVERVIEW

Classification of the Substance or Mixture:
SERIOUS EYE DAMAGE/EYE IRRITATION-Category 2A
SKIN CORROSION/IRRITATION-Category 3

Hazard Pictograms:

Signal Word: Warning
Hazard Statements: Causes serious eye irritation. Causes mild skin irritation.

Precautionary Statements
Prevention: Wear protective gloves/clothing and eye/face protection. Do not breathe dusts or mists. Do not eat, drink, or smoke when using this product. Wash hands thoroughly after handling.

Response: Get medical attention if you do not feel well. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. IF ON SKIN (or Hair): Take off immediately all contaminated clothing. Rinse skin with water or shower IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

Storage: Store locked up. Store in a well-ventilated area. Keep cool.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 3: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecylaminodimethyltrihydroxysilyl propyl ammonium chloride</td>
<td>27668-52-6</td>
<td>5.0%</td>
</tr>
<tr>
<td>[also named 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BP500 SDS 1
Chloropropyltrimethoxysilane  2530-87-2  <1.0%
Methanol  67-56-1  <1.0%

Note: The above information is not intended for use in preparing product specifications.

SECTION 4: FIRST AID MEASURES

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. Continue to flush eyes with plenty of water.

Inhalation:
Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. In unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin Contact:
In case of contact, flush skin with plenty of water for at least 30 minutes. Get medical attention immediately if irritation develops or persists. Wash contaminated clothing thoroughly before reuse. Clean shoes thoroughly before reuse.

Ingestion:
Get medical attention immediately. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability of the Product
Not combustible.

Extinguishing Media
Small Fire: Use DRY chemicalpowder
Large Fire: Use water spray, fog, or foam. Do not use water jet as an extinguisher, as this will spread the fire.

Protective Equipment for Firefighters
Firefighters should wear full protective clothing including self contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Small Spill or Leak
Dilute with water and mop up or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary, use suitable protective equipment (Section 8). Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill or Leak
Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use suitable protective equipment (Section 8). Do not release into the environment.

Containment Methods
Stop the flow of material if this is without risk. Prevent spilled material from entering sewage and drainage systems which lead to waterways. Contain and collect spillage with absorbent material, i.e. sand, earth, diatomaceous earth and place in a container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product.

7. HANDLING AND STORAGE
Protective Measures: Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Wear appropriate respirator when ventilation is inadequate. Do not enter storage spaces unless adequately ventilated. Keep in the original container and keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking, or smoking. Wear appropriate personal protective equipment.

Conditions for Safe Storage: Do not store below 0°C (32°F). Store in accordance with local regulations. Store in a segregated area. Store in original container protected from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials and food and drink. Separate from acids and oxidizing materials. Keep container closed and tightly sealed until ready for use. Use appropriate containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>OSHA PEL 200ppm TWA, ACGIH TLV 250ppm STEL (skin)</td>
</tr>
</tbody>
</table>

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal Protection:

- **Eyes**: Chemical splash goggles and/or face shield.
- **Skin**: Permeation resistant gloves. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. Permeation resistant clothing and foot protection.
- **Respiratory**: No personal respiratory protective equipment is normally required. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable), an approved respirator must be worn.
- **General Hygiene Considerations**: When using, do not eat, drink, or smoke. Do not get in eyes. Do not get this material in contact with skin. Wash hands and face before breaks and immediately after handling the product. Wash hands after handling and before eating. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical State**: Liquid with moderate viscosity
- **Color**: Colorless to pale yellow
- **Odor**: Characteristic
- **PH**: 4.0-6.0
- **Evaporation Rate**: Not available
- **Explosion Limits**: Not available
- **Specific Gravity**: 1.00 ± 0.02
- **Solubility**: Soluble in cold or hot water
- **Auto-ignition Temperature**: Not available
- **Decomposition Temperature**: Not available

10. CHEMICAL STABILITY AND REACTIVITY

- **Reactivity**: No specific test data for this product
- **Chemical Stability**: Material is stable under normal conditions.
- **Conditions to Avoid**: Extremes of temperature and direct sunlight.
<table>
<thead>
<tr>
<th>Incompatible Materials</th>
<th>Inorganic acids and bases. Avoid contact with oxidizing agents (for example, nitric acid, peroxides, and chromates.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Carbon monoxide. Organic compounds which may be toxic.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Hazardous polymerization will not occur.</td>
</tr>
</tbody>
</table>

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**
Dermal contact. Eye contact. Inhalation. Ingestion.

**Acute Effects-Skin**
Causes skin irritation.

**Acute Effects-Eyes**
Causes serious eye irritation.

**Acute Effects-Inhalation**
Vapor may be irritating to the respiratory system.

**Acute Effects-Ingestion**
Harmful if swallowed. May cause burns to mouth, throat, and stomach.

### 12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with requirements of the National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or regional office of the EPA.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Do not contaminate water, food, or feed by storage and disposal. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA regional office for guidance.

**Pesticide Disposal:** Contaminated products/soil/water may be RCRA/OSHA hazardous waste. Inactivation of solutions containing Bio-Protect 500 may be accomplished by addition of an equivalent amount of anionic surfactant or detergent. Container disposal: (plastic) Triple rinse (or equivalent) then offer for recycling or reconditioning, puncture and dispose of in a sanitary landfill, incineration, or by burning (if allowed by the state and local authorities). If burned, stay out of smoke.

### 14. TRANSPORT INFORMATION

DOT-Basic Shipping Requirements: Not Regulated by DOT

### 15. REGULATORY INFORMATION

**U.S. Federal Regulations**
- **TSCA:** All components are listed on the TSCA inventory.
- **CERCLA Reportable Quantity:** Methanol 5000 lb.
- **SARA Title III Section 302 Extremely Hazardous Substances:** No products were found.
- **SARA Title III Section 313 Chemical Notification and Release:** Methanol is reportable.

**State Regulations**
- **CALIFORNIA:** Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer: None
Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause birth defects or other reproductive harm: Methyl Alcohol

MASSACHUSETTS: Methyl Alcohol

NEW JERSEY: Chloropropyl trimethoxysilane, Methyl Alcohol

PENNSYLVANIA: Chloropropyl trimethoxysilane, Methyl Alcohol

INTERNATIONAL REGULATIONS:

EINECS registry number for 3-(trimethoxysilyl)propyldimethyloctadecyl ammonium chloride is 248-595-816.

16. OTHER INFORMATION

Notice to the Reader: The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. However, no warranty is made as to the accuracy of and/or sufficiency of such information. The Buyer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products.