

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 (Infotrac)

SECTION 2: HAZARDS IDENTIFICATION/EMERGENCY OVERVIEW

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

Hazard Pictograms :



Signal Word: Hazard Statements : <u>Precautionary Statements</u>	Warning Causes serious eye irritation. Causes mild skin irritation.
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 . Keepcool.
Disposal:	Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 3: COMPOSTION/INFORMATION ON HAZARDOUS INGREDIENTS

	CAS No.	% Weight
Octadecylaminodimethyltrihydroxysilyl propyl	27668-52-6	5.0%
ammonium chloride		
[also named 3-(trihydroxysilyl} propyldimethyloctadecyl		
ammonium chloride]		

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 N	IEASURES
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.
SkinContact:	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 MEAS	SURES
Small Spillor 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.
LargeSpillorLeak	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.

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 StorageDo 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		
Ingredient	Exposure Limits	
Methanol	OSHA PEL 200ppm TWA, ACGIH TLV 250ppm STEL(skin)	
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

ReactivityNo specific test data for this productChemical StabilityMaterial is stable under normal conditions.Conditions to AvoidExtremes of temperature and direct sunlight.

Incompatible Materials	Inorganic acids and bases. Avoid contact with oxidizing agents (for example, nitric acid, peroxides, and chromates.)
Hazardous Decomposition Products	Carbon monoxide. Organic compounds which may be toxic.
Hazardous Polymerization	Hazardous polymerization will not occur.

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 of 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	<u>C</u> ALIFORNIA: 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 AlcoholMASSACHUSETIS:Methyl AlcoholNEWJERSEY:Chloropropyl trimethoxysilane, Methyl AlcoholPENNSYLVANIA: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.