



VIACLEAN
TECHNOLOGIES

BIOPROTECT

the world's most effective, versatile & patented antimicrobial technology

PERSISTENT | CONTINUOUS | CLEAN

VIACLEAN TECHNOLOGIES LLC

Our promise is to continue to research and develop environmentally responsible solutions that help continuously and persistently protect life's surfaces.

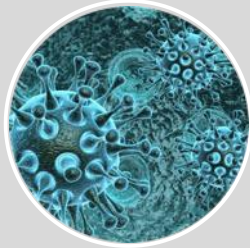


The
BIOPROTECTUs™
System

Established in January 2018, ViaClean Technologies LLC is a Philadelphia based biotech with a focus on the continued development of safe, innovative and environmentally responsible solutions to traditional cleaning technologies. ViaClean believes that life on this planet is precious, and has a breakthrough antimicrobial technology, BIOPROTECT™, to address the blatant problems plaguing current cleaning solutions.

BIOPROTECT™ - Fast Facts

Key Highlights:



BIOPROTECT™ is a patented, revolutionary antimicrobial that creates a microscopic shield on porous and non-porous surfaces to destroy bacteria on contact for up to 90 days after cleaning, even for surfaces that post treatment are immersed in water.



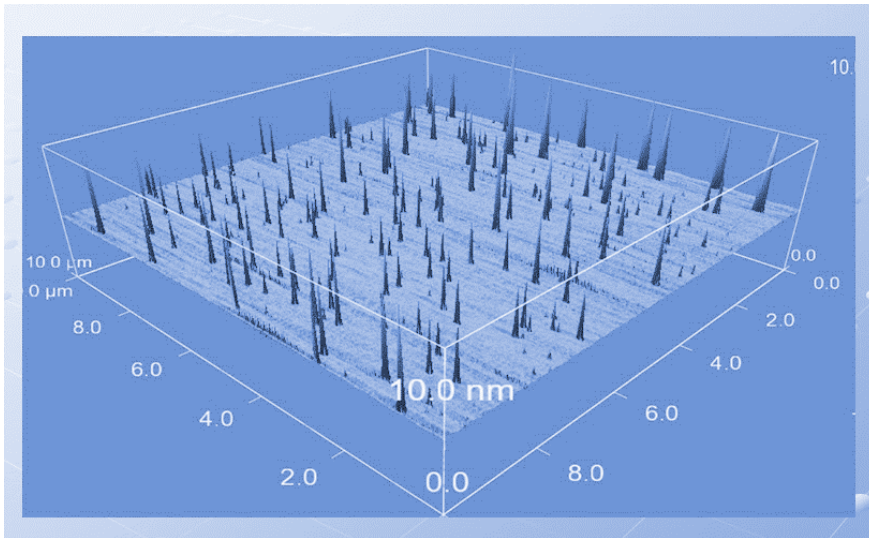
BIOPROTECT™ is water-based, non-toxic to humans and animals, contains no harmful chemicals or heavy metals, and is bound to the surface (substrate) meaning it cannot leach into the surrounding environment and is foggable in interior environments.



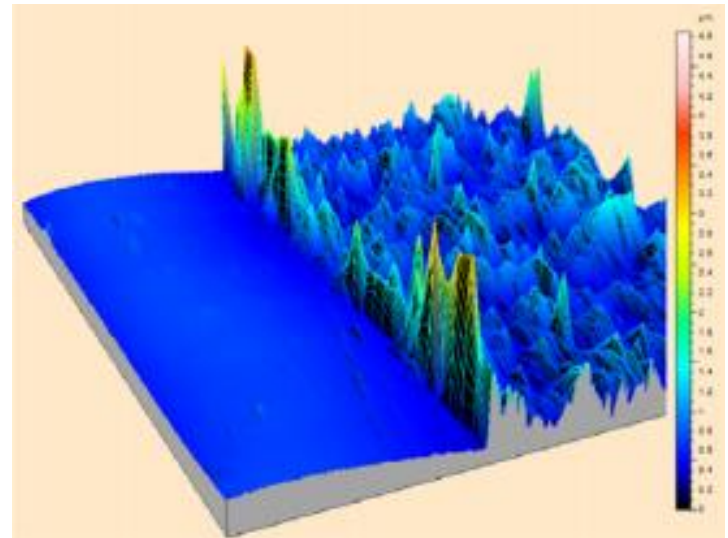
BIOPROTECT™ carries an FDA master allowance file (MAF) through the Center for Devices & Radiological Health (CDRH) as well as 2 revolutionary patents for the attachment of the UV (Generation II) molecule during the manufacturing process, extremely beneficial in the medical device, plastics manufacturing industries .

BIOPROTECT™ - how it works

When applied to a surface or incorporated into a material, BIOPROTECT forms a covalent bond with the substrate and creates a **microbiostatic antimicrobial coating**. The coating forms a nano-bed shield of spikes (self assembling monolayer), each of which carry a positive charge that attracts the negatively charged bacteria. Once attracted, the molecular spikes pierce the cell and rupture its cell membrane, causing that bacterial microorganism to die.



Self assembling monolayer



Untreated vs BIOPROTECT treated surface

Just spray or fog BIOPROTECT onto a surface directly from the bottle or sprayer, it's as easy as that. **No rinse is required**, even for food surface contact, and protection begins in 60 seconds and remains effective for up to 90 days.

BIOPROTECT™ - Products



BIOPROTECT™ AM50 Ready To Use (RTU)

BIOPROTECT™ 500

BIOPROTECT™ Dual Purpose (DP)

BIOPROTECT™ Laundry Softener

BIOPROTECT™ Hand Purifier

BIOPROTECTUs™ System

BIOPROTECT™ RTU Surface Protectant

- Water based, Patented, Bound Antimicrobial Technology
- Ready To Use (RTU) formulation
- Non-Leaching
- Persistent and Continuous protection of treated surfaces for up to 90 Days
- Mode of Action - Mechanical Kill
- Works while dry
- EPA Registered
- Both colorless and odorless
- Keeps surfaces protected between cleanings
- Neutral pH
- Non-Corrosive, Non-Flammable, No VOC's
- Food Contact Surface Preservative



BIOPROTECTUs™ System

BIOPROTECT™ RTU approved as a Food Contact Surface Preservative



BIOPROTECT™ RTU can be used on food preparation surfaces including (but not limited to):

- Cookware made from any material
- Countertops and cutting boards
- Food wrap including aluminum foil, plastic wrap, coated deli paper and plastic trays
- Collection and storage equipment
- Storage containers of any material
- Industrial prep and processing equipment/machinery
- Paper products such as wipes, tissues, wall coverings, towels and more
- Sinks and other vessels used for cleaning and transporting food and beverage products
- Carbon water filters and other drinking water filter media



BIOPROTECTUs™ System – Applicators

System Features

- Versatile and portable for ease of application to both targeted areas and broadcast areas
- Little drift, no drips
- Minimal need for confinement barriers
- Provides uniform and efficient application to all substrates
- Allows for fast drying
- Easy refilling



Victory Electrostatic Backpack Sprayer

Coats up to 8,000 sq ft on a single tank

Sprays 4-6 feet

Adjustable Particle Size – 3 settings

2.5 Gallon Tank

Weights 29lbs with a full tank

Cordless Rechargeable Battery – 4 hour



Victory Electrostatic Handheld Sprayer

Coats up to 1,000 sq ft on a single tank

Sprays 2-3 feet

Adjustable Particle Size – 3 settings

33.8 Oz Tank

Weights only 5.9lbs with a full tank

Cordless Rechargeable Battery – 4 hour



BIOPROTECTUs™ System

Common Touchpoints for application



Carpets

HVAC Systems

Smart Phone

Door Knobs

Faucets

Light Switches

Elevator Buttons

Bathroom Sinks

Bathroom

Showers

Linens

Towels

Uniforms

Cleaning Cloths

Mops

Sponges

Footwear

Preparation
Areas



***Any area subject to moisture**

ViaClean Technologies, LLC R&D Executives



DR. CURTIS WHITE, PhD || CHIEF TECHNOLOGY OFFICER

Dr. White, often denoted as the ‘godfather of antimicrobials, is the developer and creator of BIOPROTECT™ Generation 1 molecule. Dr White has been involved in the research, development, registration, and commercialization of antimicrobial agents since 1962 as a teacher and employee at Dow Chemical, F. Jos Lamb, Dow Corning, Aegis and currently is the Chief Technology Officer of ViaClean Technologies, LLC. Dr. White, recognized as a leader in the understanding and control of microbial problems on substrates, in products, and in the indoor environment, has over 50 patents and 200 plus technical, trade, and standards organizations papers and presentations.



**DR. LUKASZ POROSA, PhD || CHIEF CHEMIST, R&D DIRECTOR
VIACLEAN TECHNOLOGIES LLC**

Dr. Lukasz Porosa, PhD, joined ViaClean in 2018 as lead chemist and R&D director after developing proprietary bonding chemistries in the BIOPROTECT™ line of non-leaching antimicrobials at Ryerson University, Canada. Dr. Porosa has extensive experience in researching, developing and commercialization of pathogen and microbial technologies.

Dr. Porosa leads the research and product development strategies of ViaClean with responsibility in the management of all technical resources as well as strategic technical plan development for current and future products Dr. Porosa also executes oversight of government and regulatory approval processes and compliance for all product formulation which also includes associated intellectual property. As ViaClean’s Chief Chemist Dr. Porosa directly manages all testing and executes any training of direct and contracted technicians.