



PREMIER90X

SURFACE PROTECTION GUIDE

by Premier Fitness Service

Summary

Premier90X™ serves as a long-lasting defense against germs, odors, mold, and mildew. The unique barrier technology has an EPA approved bacteriostatic (EPA Reg #83129-1) as it kills without poison and will not leach off treated surfaces or create super bugs.

Premier in no way is making a health claim that someone will not get a virus, or that we can cure anybody from a virus by treating their surroundings.

Introducing the Best Protection

Independent studies have shown **Premier90X™** to be effective against Salmonella, E-coli, Listeria, Noro Virus and a wide range of bacterial and viral contaminants.

Environmentally Friendly

Microscopic “needles” puncture organisms using a physical kill not a chemical kill (poison).

Protective Barrier

Protective Barrier reduces cross contamination on high touch and at-risk surfaces.

Prevents Germs, Mold and Mildew

Biofilm cannot exist on a **Premier90X™** treated surface, therefore germs, mold and mildew cannot thrive.

Long Lasting

Provides a protective surface that is not destroyed by daily cleaning and lasts 30 to 90 days depending on surface abrasion/use, with each simple application

Typical disinfectants kill viruses and bacteria within 10 minutes, but once the product dries, there’s no further protection. The cleaned surface is now ready to be re-contaminated. Imagine someone wiping and disinfecting a surface every time new microbes contaminate it.

Premier90X™ is not a replacement for existing disinfecting protocols but serves as the primary level of defense against germs, odors, mold, and mildew. Our unique coating technology contains an EPA approved bacteriostatic (EPA Reg #83129-1) as it kills without poison and will not leach off treated surfaces or create super bugs.

The first and foremost thing to remember about **Premier90X™** is that by treating a surface, NewEraSOS in no way is making a health claim that someone will not get a virus, or that we can cure anybody from getting a virus by treating their surroundings. It is also important to remember that **Premier90X™** contains an EPA registered bacteriostatic, meaning that it protects surfaces from contamination after it has been applied, and not as a biocidal agent that kills viruses on contact.

Surface Protection Discussion

The coronavirus has been making headlines in both the national and international news, and Premier has been fielding calls regarding **Premier90X™** and its use to protect surfaces in stricken areas.

Most companies registering biostatic agents never consider viruses in their application process, as viruses are not biologically active on a surface for long periods, usually minutes to hours; and they do not grow on their own, they need a host cell to replicate. This being said, Silane Quaternary Ammonium Chlorides like **Premier90X™** have been shown to be both biocidal to viruses on contact, and biostatic to viruses when applied to a surface first and then contaminated with a viral loading.

There are a few facts that will help in the information process when discussing **Premier90X™** to potential clients that are concerned about Corona COVID-19.

First, there is no product in the United States that is registered with the EPA as being effective on Corona Virus. The EPA and CDC are basing efficacy against COVID-19 by stating that a product should be able to kill the Corona virus if it is effective against enveloped viruses. They also go a step further by saying that a product that is effective against non-enveloped viruses is preferred, as the non-enveloped viruses are harder to kill than enveloped viruses. **Premier90X™** has been shown to be effective against both enveloped and non-enveloped viruses.

Second, bleach has been the go-to product for disinfecting hard, non-porous surfaces. The CDC in the United States has recommended the use of bleach because it is effective on both enveloped and nonenveloped viruses and it is readily available and inexpensive. The downsides of bleach are that it is corrosive on certain surfaces, it will discolor some surfaces, its lifespan in concentrate

deteriorates over time and when mixed in a ready to use format its lifespan is much shorter. The main downside of course in relation to our product is that bleach is only effective on a surface as a biocidal agent for a matter of a few seconds. Then it loses its power to disinfect. It has no residual properties. The benefit of our **Premier90X™** product is that when used after a bleach application, (or after other approved disinfectants), the surface will stay protected from microbes, including the Corona virus. It is important to note that we are not trying to distinguish ourselves as an alternative to bleach or other disinfectants. Based on its price and need for constant use in some areas, bleach is certainly a good application. But there are many areas that could also be treated with **Premier90X™** to protect those surfaces either in-between bleach or other approved disinfectant applications, or in place of those applications.

Third, the biggest observation Premier has in selling **Premier90X™** is that there is no viral claim directly on the label from the EPA. This goes along with the points of item one. As far as we have seen in the research, there is no product on the marketplace that has long term preventative viral claims.

But, the CDC, the ECDC (European CDC), Doctors Without Borders (MSF), the W.H.O., and several other organizations have all said that bleach alone is not working, and have called for novel approaches to help reduce the risk of transmission, both from people and from surfaces. The United States EPA, the FDA, and the CDC allow for emergency use of products when a public health emergency is occurring. The most cited documentation we should be using is EPA Chapter 18 of Pesticide Registrations, which deals directly with this issue. Individual states also allow for the emergency use of a pesticide in matters of public health, even if the use is not stated on the Federal EPA registration.

Premier90X™ and Novel Coronavirus

The Center for Biocide Chemistries has created a list of more than 100 ready-to-use, dilutable and wipeable biocidal products that the EPA has approved as effective at killing viruses *like the novel coronavirus*. These products make certain kill claims against what is present on a person or on a surface but do not have any lasting protection.

What does this mean? If you disinfect or sanitize a surface, that same surface can be re-contaminated immediately after the disinfecting and/or sanitizing event. A simple example is an airplane that is completely disinfected after passengers exit the plane. Once new passengers board the airplane, all surfaces can be immediately re-contaminated.

Laboratory tests have shown that the active ingredient built into **Premier90X™** is effective against over 100 pathogens that come in contact with a surface that has been treated with **Premier90X™**. A small sample of the most common yet dangerous organisms within the 100 pathogens are:

- Gram positive bacteria - Clostridium Difficile (vegetative cell), VRE, MRSA, Staphylococcus, Listeria.
- Gram negative bacteria - E Coli, Salmonella.
- Viruses - Herpes, Norovirus, HIV1, Influenza A2, B

Partial List of Pathogens Destroyed or Inactivated by 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride (SAR-CoV-2 / COVID-19 / Coronavirus has an enveloped structure)

<u>Virus</u>	<u>Structure</u>	<u>Virus</u>	<u>Structure</u>
Influenza A2 (Aichi)	Enveloped	Norovirus	Non-Enveloped
Influenza A2 (Asian)	Enveloped	Simian Virus 40	Non-Enveloped
Influenza B	Enveloped	MS2	Non-Enveloped
HIV1	Enveloped	PRD1	Non-Enveloped
Herpes simplex Type I	Enveloped	Bovine Adenovirus Type I & IV	Non-Enveloped
Herpes simplex Type II	Enveloped	Adenovirus Type II & IV	Non-Enveloped
Rous sarcoma	Enveloped	Reovirus Type I	Non-Enveloped
Mumps	Enveloped		
Vaccinia	Enveloped		
Parainfluenza (Sendai)	Enveloped		

The above test results do not imply any public health claim nor are they meant to imply users are protected from these organisms. All testing was performed in an independent laboratory setting and may differ within actual applied settings. When called for; routine disinfecting or cleaning protocols should always remain in place and continue.

For more information, please visit the CDC website at: <https://www.cdc.gov/coronavirus/2019-ncov/>.

Are Your Surfaces Protected?

Sanitizing and Disinfecting – Required but is it Enough?

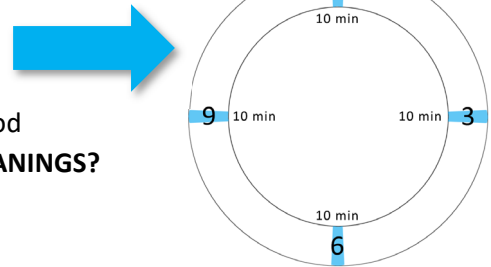
Surfaces treated with sanitizers and disinfectants are germ-free for only the brief period of time from when your sanitizer/disinfectant is applied to when it dries.

Your surface is NOT protected between Sanitizing and Disinfecting cleaning events!

Surface cross-contamination occurs throughout the day and night everywhere through droplets, direct surface contact and airborne transmission.

Surface Protection When You Sanitize/Disinfect 4 Times Daily

- Up to 40 minutes of Surface Protection
- Surfaces are protected 2.8% of the time in a 24-hour period
- **ARE YOUR SURFACES REALLY PROTECTED BETWEEN CLEANINGS?**



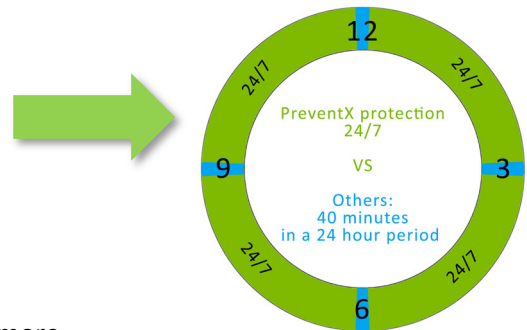
Surface Protection using Premier90X™

Biofilm cannot exist on a **Premier90X™** treated surface therefore, germs, mold and mildew cannot thrive in-between sanitizing and disinfecting events ensuring maximum surface protection.

Surface cross-contamination, regardless of type, is significantly reduced everywhere **Premier90X™** is used.

Surface Protection Using Premier90X™

- Surface Protection 24 hours 7 days a week
- One application protects surface for 30 to 90 days
- Implement one of the **Premier** programs, and Maximize your protection
- Depending on friction or ultraviolet, can last a year or more
- Lasts up to 20 plus washes after treatment on fabrics
- Approved for use on:
Hard surfaces & fabrics air filters, awnings, building materials & components, blankets, bed linen, granite, stone, siding, bathroom, carpets, curtains, countertops, fabrics, walls, ceiling tile, concrete, flooring, footwear, ceramic, stainless, vinyl, porcelain, marble, aluminum, leather, mats, fire resistant coatings, plumbing fixtures, pillows, roofing materials, sand bags, tents, tarps, shoe insoles, socks, shower curtains, toweling, umbrella, upholstery, vacuum bags, Clothing, underwear, face masks, PPE.



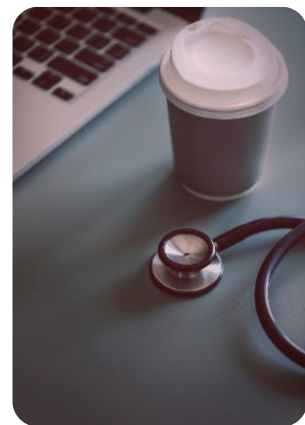
Overview and Benefits

Premier90X™ is an all surface durable protection barrier that provides a final bacteriostatic finish on surfaces to impart long-lasting antimicrobial protection reducing corporate liability, making future cleanings easier, while extending the life of your surfaces.

Top benefits of long-lasting antimicrobial surface protection:



- An affordable, fast and convenient spray and wipe application that is available in concentrate up to 3X and in ready-to-use.
- Independent studies have shown the active ingredient in **Premier90X™** to be effective against many organisms including but not limited to Salmonella, E coli, Listeria, Noro Virus, a wide range of odor causing bacterial, and viral contaminants.
- **Premier90X™** contains an EPA registered antimicrobial.
- Typical disinfectants work while wet, but once the product dries there is no further protection and the treated surface is ready for re-contamination. **Premier90X™** will continue to protect your surfaces against germs, mold, and mildew for 30 to 90 days depending on surface use.
- Reduces ATP scores for added safety compliance.
- Germs cannot thrive on a surface treated with **Premier90X™**.
- **Premier90X™** Provides a protective finish that bonds to the surface, not destroyed by normal daily cleaning.
- The antimicrobial technology built into **Premier90X™** provides continuous surface protection in between cleaning and disinfecting events.
- Microscopic "carbon spikes" penetrate the cells and destroy the organisms.
- **Premier90X™** environmental green technology is non-toxic, non-leaching, non-hazardous, and will not promote the growth of superbugs.
- **Premier90X™** is approved for fabrics and so much more.



Certificate of Analysis

Project: Food Borne Organisms

Project Number: Developmental

Description Samples treated with AEM5772	Microbiological Analysis ¹ Percent Reduction Per Test Organism ³				Chemical Analysis ² Percent Extraction	Pass/Fail**
	A	B	C	D		
NAMSA Test Laboratory, Kennesaw, GA.						
Untreated	0	0	0	0	0%	Fail
Treated	99.9	99.9	99.9	99.8	86%	Pass

Red indicates highest level observed

1 ASTM E2149-01 "Dynamic Shake Flask"

1g sample
50 ml 0.3 mM KH₂PO₄
1x10⁸ bacteria / ml
0.01% Q2-5211 wetting agent

³

A: <i>Escherichia coli</i> ATCC 8739
B: <i>Staphylococcus aureus</i> ATCC 6538
C: <i>Listeria monocytogenes</i> ATCC 7645
D: <i>Salmonella choleraesuis</i> ATCC 10708

2 Antimicrobial Barrier BPB Extraction (EXT):

1.0g sample weight 0.001% BPB
dH₂O solution 20 minute exposure
595nm Absorbance
0.01 % Q2-5211 Wetting Agent

This project has been reviewed and approved by:

Robert A. Monticello, Ph.D.
Laboratory Director
ÆGIS Laboratory Services

Certificate of Analysis

Antimicrobial Barrier

Test Method: ASTM E2149-01

Tested Against: Methicillin Resistant *Staphylococcus aureus* (MRSA)

This antibacterial test was performed to demonstrate the effectiveness of the Antimicrobial Barrier technology against Methicillin Resistant *Staphylococcus aureus* (MRSA) strain. Test Methods conform to ASTM E2149-01 guidelines (Standard Test Method for Determining the Antimicrobial Activity of Immobilized Antimicrobial Agents Under Dynamic Contact Conditions). Specific details of testing and materials are listed below in the table.

These data indicate that the fabric tested, commercially treated with the Antimicrobial Barrier Technology (AEM5772/5), reduces the total population of MRSA bacteria >99.99%. Untreated fabric samples tested in parallel demonstrated no effectiveness at reducing the total MRSA population. These results indicate the antimicrobial effectiveness of the sample treated with the Antimicrobial Technology against the resistant bacteria MRSA.

	MICROBIOLOGICAL ANALYSIS		
	Initial Concentration	Final Concentration	Percent Reduction
Untreated fabric sample	1.52 x 10 ⁵ / ml	1.6 x 10 ⁵ / ml	0%
Treated fabric sample	1.52 x 10 ⁵ / ml	< 1.0 x 10 ¹ / ml	>99.99%
Inoculum control	1.52 x 10 ⁵ / ml	1.55 x 10 ⁵ / ml	0%

ASTM E2149-01	
Standard Test Method for Determining the Antimicrobial Activity of Immobilized Antimicrobial Agents Under Dynamic Contact Conditions.	
Total Contact Time:	1 hour
Total Volume:	50 ml 0.3 mM KH ₂ PO ₄ + 0.01% Q2-5211
Bacterial Strain:	Clinical Isolate Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA)
Description of Sample Tested:	1g each fabric commercially treated and untreated with AEM5772/5

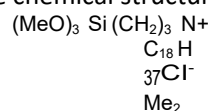
Certified by: Robert A. Monticello, Ph.D.
Robert A. Monticello, Ph.D.

For questions or additional information regarding this Certificate of Analysis, please contact us.

Premier90X™ vs “water based”

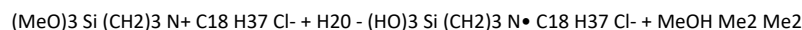
In the late 1990's and early 2000's, an effort was made to create a product that could compete with the efficacy of Premier90X™ Antimicrobial. Several attempts were made, and a formula was discovered that simplified the production by removing the required methanol. Over the years several companies have tried to compete in the marketplace by advertising this methanol free version of the quaternary silane, but most often quickly fail when they discover that the efficacy of the product fails to meet objective of providing a stable product to clients, that has long term residual effect on a surface.

The long-term chemical stability of Premeier90X™ active antimicrobial, 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride, is due to the initial manufacturing of the molecule in methanol. The chemical structure of the active antimicrobial molecule is:



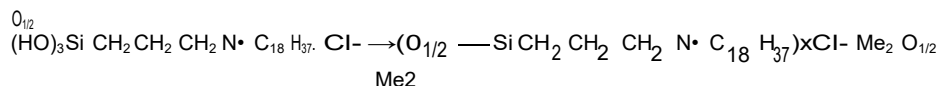
This product when placed in water, quickly reacts to form a highly reactive intermediate as shown below:

Hydrolysis



As long as the methanol content is present, an equilibrium remains in place delaying the start of bonding to itself or other reaction sites. After contact with a substrate the following reaction, in which the antimicrobial forms a permanent covalent bond with itself and/or available reaction sites on the substrate becomes dominant. The reaction is driven by drying.

Condensation



The initial association to the substrate is probably made through the attraction of the positively charged cation to surfaces that exhibit a negative character in the aqueous media.

When the active antimicrobial is made from an aqueous phase (water based) formula rather than methanol, there is immediate self-polymerization from the monomer to a long chain polymer of the active antimicrobial, resulting in fewer reaction sites both to bond and attack microbes. This means that there is less activity of the formula, as it has begun to bond to itself. Over a short amount of time all of the active material will polymerize to itself. The three bonds of the methanol formula occur over a time, from immediately (once dried) for the first site and up to 29 days for the final bonding. During this time a rotation is occurring (the positively charged Nitrogen atoms and the octadecyl chains are constantly rotating in space) that allows for a uniform layer of antimicrobial protection. Again, the water-based product will not have this needed rotation. On direct contact with a microorganism the technology works by disrupting (or rupturing) the cell membrane. This interrupts the normal life processes and destroys the cell. Two forces cause the interruption: the quaternized Nitrogen acts as an electrocuting charge and the 18 carbon link chain acts as a sword. This structure is ideal for taking advantage of the anionic nature and the lipoprotein composition of microbial membranes. Since this antimicrobial acts only on the membrane and does not lose strength over time, it does not create the conditions which allow microorganisms to adapt to its presence or develop resistance.

Partial List of Pathogens Destroyed or Inactivated by 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride

Gram Positive Bacteria	Viruses	Fungi, Algae, Mold, Yeast, Spores cont.
<p>Bacillus sp. Bacillus subtilis Clostridium difficile (veg. cell) Corynebacterium diphtheria Enterococcus sp. (incl. VRE) Micrococcus sp. Mycobacterium Tuberculosis Mycobacterium smegmatis Propionibacterium acnes Staphylococcus aureus Staphylococcus aureus (MRSA) Staphylococcus epidermis Streptococcus faecalis Streptococcus mutans Streptococcus pneumonia Streptococcus pyogenes</p>	<p>Adenovirus Type II & IV Bovine Adenovirus Type I & IV Feline pneumonitis Herpes simplex Type I Herpes simplex Type II HIV1 Influenza A2 (Aichi) Influenza A2 (Asian) Influenza B Mumps Parainfluenza (Sendai) Rous sarcoma Reovirus Type I Simian Virus 40 Vaccinia MS2 PRD1 Norovirus</p>	<p>Microsporium sp. Microsporium audouinii Monilia grisea Oscillatoria sp. Penicillium chrysogenum Penicillium commune Penicillium funiculosum Penicillium pinophilium Penicillium variable Phoma fimeti Pithomyces chartarum Poria placenta Pullularia pullans Scenedesmus Saccharomyces cerevisiac Scolecobasidium humicola Senastrum gracile Senastrum sp. Trichoderma viride Trichophyton interdigital Trichophyton maidson Trichophyton mentagrophytes Trichophyton sp.</p>
<p>Gram Negative Bacteria</p>	<p>Fungi, Algae, Mold, Yeast, Spores</p>	<p>Protozoa Parasites</p>
<p>Actinetobacter aerogenes Actinetobacter calcoaceticus Aerobacter aerogenes Aeromonas hydrophilia Citrobacter deversus Citrobacter freundii Enterobacte aerogenes Enterbacter agglomerans Enterobacter cloacae Enterococcus sp. coli Klebsiella oxytoca Klebsiella pneumoniae Klebsiella terriena Legionella pneumophila Morganeella morganii Mycobacterium tuberculosis Proteus mirabilis Proteus vulgaris Pseudomonas aeruginosa Pseudomonas fluorescens Psuedomonas pulida Salmonella cholera suis Salmonella typhimunium Salmonella typhosa Serratia liquifaciens Serratia marcescens Treponema hyodysenteriae Xanthomonas campestris</p>	<p>Alterania alternate Aphanizomenon sp. Aspergillus flares Aspergillus flavus Aspergillus niger Aspergillus sydowii Aspergillus terreus Aspergillus versicolor Aspergillus verrucari Anabaena cylindrica Aureobasidium pullans Candida albicans Candida pseudotropocalis Cephalascus fragans Chaetomium globsum Chlorophyta protococcus Chlorophyta selenastrum Chlorophyta sp. Chrysophta sp. Chlorella vulgaris Cladopsorium cladosporioides Cyanophyta anabaena Cyanophyta oscillatoria Cyanophyta (bluegreen) sp. Dreschslera australiensis Epidermophytan sp. Gliomastix Cerealis Escherichia Gloephyllum trabeum Gonium sp.</p>	<p>Cryptosporidium parvum</p> <p>Disclaimer: All of the above organisms have been laboratory tested. These results are not meant to imply that the user is protected from these organisms. Only that the applied surface is protected based on laboratory results. Actual field results can vary.</p>

Reference List of Pathogens Destroyed or Inactivated by 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride

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Frequently Asked Questions

What surfaces can Premier90X™ be applied?

Premier90X™ can be used as a final bacteriostatic finish on multiple surfaces such as door knobs and handles, gloves, cabinetry, and surfaces subject to odor producing bacteria, mold, mildew, and algae; showers, counter tops, fixtures, grout/tile, carpets, equipment, walls, etc.

How does the Premier90X™ technology work?

The active ingredient in **Premier90X™** forms a colorless, odorless, positively charged polymer that molecularly bonds to the treated surface. You could think of it as a layer of electrically charged swords. When a microorganism comes in contact with the treated surface, the C-18 molecular sword punctures the cell membrane and the electrical charge shocks the cell. Since nothing is transferred to the now dead cell, the antimicrobial doesn't lose strength and the sword is ready for the next cell to contact it.

What is the purpose of the silane portion of the molecule?

Silanes are extremely efficient bonding agents that can be coupled to other molecules and then used to permanently bond those molecules to a target surface. The antimicrobial silane in **Premier90X™** modifies virtually any surface and transforms it into a material that will not support microbial growth.

Difference between Premier90X™ and other antimicrobials?

Conventional products penetrate living cells and kill by way of poisoning the organism or disrupting a vital life process. They are designed to act quickly and dissipate quickly. Most commercial antimicrobials used for treating surfaces do an adequate job of killing bacteria and fungi, although most have a limited range of effectiveness. The **Premier90X™** technology takes a totally unique approach. It provides an effective initial microbial kill when applied, but, unlike the conventional methods, it also provides long-term control of growth on treated surfaces, often for the life of that surface. The surface itself is modified to impart antimicrobial properties.

Against what types of bacteria is Premier90X™ technology effective?

The **Premier90X™** technology has a mode of action that involves a positive charge and is effective against all bacteria, plus fungus, algae, and mold. A representative list of microbes and viruses against which the **Premier90X™** technology has been tested may be obtained by contacting our corporate office.

Does the biostatic use a heavy metal?

No. **Premier90X™** does NOT contain any heavy metals. Tin, arsenic, silver and copper are often used in other antimicrobials.

How long does the treatment last?

In most cases, a minimum of 30 days. The life of a treated surface depends on a number of factors, not the least of which is surface preparation. If you treat a dirty or unstable surface, when the dirt comes off or the surface is disturbed, some of the antimicrobial will be removed with it. Abrasive or caustic (pH>10.5) cleaners will also shorten effective life.

Why is Premier90X™ so durable?

Because of their exceptional chemical bond (a covalent bond) the bonded polymer is neither soluble nor volatile. The unique bond results in the **Premier90X™** polymer becoming an integral part of the substrate.

Is Premier90X™ permeable to moisture?

Yes, moisture that is in or on the treated material/surface passes through the treatment. After curing, the treatment is somewhat hydrophobic (water repellent), but it should not be considered to be a replacement for commercial water repellents.

Will its use result in “super bacteria”?

No. Adaptation studies show that microbes do not adapt to **Premier90X™** and no ‘Zone of Inhibition’ develops.

What studies are available on the Technology built into Premier90X™?

- Improved Control of Microbial Exposure Hazards in Hospitals: A 30-Month Field Study
- **Premier90X™** durable antimicrobial finish theoretical, laboratory & field experience durability & antimicrobial efficacy: A healthcare perspective
- Evaluation of Effects on Elevated Levels of Normal Skin Bacterial Flora with Fabrics Treated with 3-(Trimethoxysilyl) Propyldimethyloctadecyl Ammonium Chloride
- Reference List of Pathogens Destroyed or Inactivated by 3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride
- ATP Field Studies

Premier90X™ Label



DURABLE ANTIMICROBIAL FINISH

ACTIVE INGREDIENTS:
 3-(Trimethoxysilyl) Propyltrimethyl Octadecyl Ammonium Chloride ...1.0%
OTHER INGREDIENTS:.....99.0%
TOTAL:.....100.0%

KEEP OUT OF REACH OF CHILDREN
CAUTION

An antimicrobial preservative to preserve finished food contact articles such as food preparation surfaces and polymeric tubing for beverages subject to FDA regulations.

Imparts durable biostatic and antimicrobial activity to surfaces of a wide variety of substrates such as hard surfaces and fabrics subject to EPA regulations.



May cause eye irritation

Manufactured for:



EPA Reg. No. 92057-3-91116

EPA Est. No. 37735-NC-001

32 FL OZ (946 mL) or 16 FL OZ (473 mL)

**83129-1
Antimicrobial**

A Silicone Quaternary Ammonium Salt

Active Ingredient:	3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride	0.67%
Inert Ingredients:	99.33%
TOTAL INGREDIENTS:	100.0%

KEEP OUT OF REACH OF CHILDREN

EPA Reg. No. 83129-1(2)

EPA EST. (66428-SC-001)

NET CONTENTS: 2, 4, 8, 10, 12, 16, 20, 24, 32 or 64 fluid oz.; 1, 5, 55, 150, 250, 275 or 300 gal. Lot No. _____

*An Antimicrobial agent is an agent that inhibits the growth of odor causing bacteria, bacteria which cause staining and discoloration, fungi (mold and mildew), and algae. This product does not protect users or others against food-borne or disease-causing bacteria.

ENVIRONMENTAL HAZARDS

Commercial and industrial uses: 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 the requirements of a 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 to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

De-activation may be required during clean up if a spill occurs. De-activation of **83129 Antimicrobial** can be achieved by the addition of anionic surfactant (such as soap, sulfonates, sulfates) in quantity equivalent to that of **83129 Antimicrobial**.

Homeowner use: This pesticide is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of pesticide.

DIRECTIONS FOR USE

Approved commercial and Industrial Applications

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Wear protective eyewear (goggles or face shield) and gloves when using this product. Dry treated areas and articles such as clothing before use. Remove children and pets from treated area until completely dry.

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Do not use in any application involving direct or indirect food or drinking water contact.

83129 Antimicrobial can be applied to organic or inorganic substrates by brushing, dipping, wiping, padding, soaking, spraying, fogging or by using foam finishing techniques.

Dry substrates at temperatures from ambient to a maximum of 160° C (320° F) to effect complete condensation of silanol groups and to remove water, solvents and/or traces of methanol from hydrolysis. Optimum application and drying conditions, such as time and temperature, should be determined for each application before use. If necessary, reapply **83129 Antimicrobial** every (three months), (90 days) or when odor, staining and discoloration due to bacteria, mold stains, and mildew stains return.

Approved commercial and industrial applications

The active ingredient in **83129 Antimicrobial** is effective against odor causing bacteria, bacteria which cause staining and discoloration, fungi (mold and mildew) and algae as a static agent. **83129 Antimicrobial** can be used as a final bacteriostatic finish on the following items to impart bacteriostatic/fungistatic (mold and mildew) activity.

- Air filters for furnaces, air-conditioners, air purification devices, automobiles, recirculating air handling systems
- Air filters/materials
- Apparel recreational gear, outdoor, sportswear, sleepwear, socks, hosiery, undergarments, gloves and uniforms
- Aquarium filter material
- Athletic gear and sports equipment
- Automotive and vehicular parts
- Awnings
- Building materials and components: siding, insulation and non-food contact cabinetry, wallboard, wood and wood components: interior structural wood as defined as only wood needed for basic building structure as found in the dried in stage of construction, wood dried in contact with foundations, interior and exterior wall sill plates, wood studs, wood or cellulosic sheathing, floor joists and sub-flooring. Not to be used in association with in-ground contact applications, landscape timbers, docks, boardwalks, and deck furniture or other dimensional lumber.
- Blankets
- Bedspreads
- Bed sheets, blankets, and bedspreads
- Bathroom and non-food contact kitchen hardware
- Book covers and pictures
- Buffer pads (abrasive and polishing)
- Carpets, carpet underlay and draperies
- Ceiling Tiles
- Cloth for sails
- Curtains
- Draperies
- Non-food contact counter tops
- Concrete products
- Concrete additive for sewer pipes, manholes and concrete sewer structures; not to be used in treatment of storm drains
- Non-food contact convey or humidifier belts
- Non-woven disposable diapers

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