



Antimicrobial Surface Protection

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 microorganisms contaminate it or spread further.

PreventX 24/7™ is not a replacement for existing disinfecting protocols but serves as the secondary level of defense against microorganisms, bacteria, mold, and mildew. Our unique coating technology is an EPA approved bacteriostatic (EPA Reg #91116-1) as it kills without poison and will not leach off treated surfaces or create superbugs.

The first and foremost thing to remember about **PreventX 24/7™** is that by treating a surface, HealthCare Synergy in no way is making a public health claim. The EPA has not yet approved any registered antimicrobial for viral claims. **PreventX 24/7™** is an EPA registered antimicrobial, allowing for durable bacteriostatic, fungistatic, and algaestatic surface protection.

Highlighted benefits are:

Environmentally Friendly

Non-Toxic, non-poisonous microscopic electrostatically held on the surface "needles" puncture organisms using a physical kill, not a chemical kill, also means no superbugs.

Protective Barrier

The protective barrier reduces cross-contamination on high touch and at-risk surfaces.

Prevents Mold, Mildew, and other Microorganisms Growth on Surfaces

Biofilm cannot exist on a **PreventX 24/7™** treated surfaces; therefore, mold, mildew, and other microorganisms cannot thrive.

Long Lasting

PreventX 24/7™ provides a protective surface that is not destroyed by daily cleaning and lasts up to 90 days, depending on surface abrasion/use, with each simple application.

Sustainable & Healthy Surface Environment (benefits continued)

PreventX 24/7™ is the foundation strategy used to maintain a sustainable and healthy surface environment.

(1) www.epa.gov, Evaluation of Residual Efficacy against Viruses on Surfaces, US EPA

(2) www.epa.gov, EPA Administrator Andrew Wheeler Announces Expedited Pathway for Companies to Claim "Long-Lasting" Efficacy for Antiviral Products, US EPA

The role of **PreventX 24/7™** is to provide surface protection in-between regular cleanings and disinfecting.

- **PreventX 24/7™** is approved by the EPA for use on many surfaces, including many different hard surfaces, blankets, bedding, carpets, curtains, drapes, concrete, apparel, PPE, air filters, awnings; practically all surfaces except food contact surfaces.
- **PreventX 24/7™** provides long-lasting surface protection between cleanings and disinfecting.
- Advertise and promote to staff and customers the added measures being taken to reduce microorganisms on surfaces.
- Significant labor savings as future cleanings become easier since microorganisms cannot thrive on a surface treated with **PreventX 24/7™**.
- Significant material savings as articles will last longer since they are protected against deterioration effects of bacteria, mold, mildew, and other microorganisms.
- **PreventX 24/7™** does NOT adhere to itself, so you cannot overtreat a surface (product continues to search out an unused negative charged space to adhere to).
- Once **PreventX 24/7™** has dried on a surface, it covalently bonds to the surface.
- The mode of action of the built-in antimicrobial relies on the Technology remaining affixed to the surface at the same concentration even after antimicrobial activity.
- Once applied, it does not migrate or create a zone of inhibition, prohibiting an organism's adaptation and mutation.
- **PreventX 24/7™** is non-leaching, non-toxic, non-migrating, and is not consumed by organisms. (This applies to both hard and soft surfaces).
- **PreventX 24/7™** does not contain any heavy metals like tin, arsenic, silver, or copper.
- Studies show that since the barrier remains electrostatically bonded to the surface molecules, there is a low potential for irritational, toxicity, or other human exposure consequences.
- Studies on hospital blankets show that the Technology built into **PreventX 24/7™** provides three times more protection from bacteria than an untreated blanket.
- A double-blind study was done on laparotomy drapes, which showed a reduction of viable potential microorganisms in critical areas by over 81%.
- Studies show that the **PreventX 24/7™** does not have adverse effects on the skin.
- Studies show that fabrics treated with **PreventX 24/7™** reduce 99.9% of the target bacteria.
- ATP studies continue to show a significant reduction of microorganisms on surfaces between the surfaces treated with **PreventX 24/7™** and those left untreated.
- You will see and feel a much cleaner surface, which means a safer and protected surface from the first application.

PreventX 24/7™ serves as a residual surface protectant that is safe and long-lasting so that a healthy surface environment can be maintained before, during, and after surfaces are cleaned or disinfected.

(1) www.epa.gov, Evaluation of Residual Efficacy against Viruses on Surfaces, US EPA

(2) www.epa.gov, EPA Administrator Andrew Wheeler Announces Expedited Pathway for Companies to Claim “Long-Lasting” Efficacy for Antiviral Products, US EPA

Are Your Surfaces Protected?

Sanitizing and Disinfecting – Required but is it Enough?

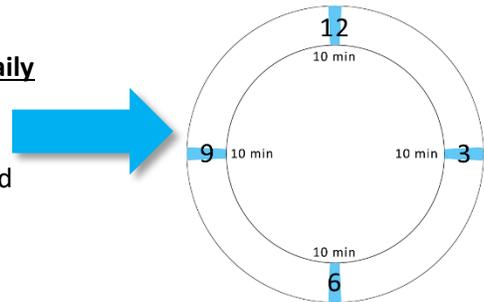
Surfaces treated with sanitizers and disinfectants are free of microorganisms for only the brief period of time from when your sanitizer/disinfectant is applied to when it dries.

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.

Limited 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?**



Surface Protection using PreventX 24/7™

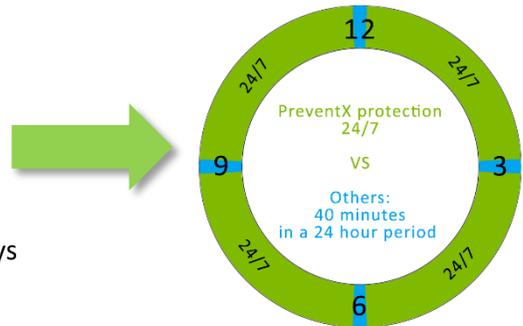
Microorganisms cannot exist on a **PreventX 24/7™** treated surface and cannot thrive in-between sanitizing and disinfecting events ensuring maximum surface protection.

Surface cross-contamination, regardless of type, is significantly reduced everywhere **PreventX 24/7™** is used.

Extended Surface Protection Using PreventX 24/7™

- Surface Protection 24 hours 7 days a week
- One application protects surface up to 90 days
- Implement one of the **HealthCareSynergy** antimicrobial programs, and **MAXIMIZE SURFACE PROTECTION**
- Depending on friction or ultraviolet, can last up to 90 days
- 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.



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Surface Protection Discussion

COVID-19 has been making headlines in both the national and international news, and HealthCare Synergy has been fielding calls regarding **PreventX 24/7™** and its use to protect surfaces in stricken areas.

There are a few facts that will help in the information process when discussing **PreventX 24/7™** to potential clients that are concerned about SARS-CoV-2.

All antimicrobials, including **PreventX 24/7™**, cannot make any claims against viruses and, furthermore, cannot mislead customers that they will be protected against viruses if their surfaces are treated.

Antimicrobials, bacteriostatics, and biostatic agents are synonymous and are surface protectants to protect surfaces against different microorganisms like bacteria, mold, mildew and algae.

There is no bacteriostatic in the United States that is registered with the EPA as being effective against SARS-CoV-2. The EPA and CDC are basing efficacy against COVID-19 by stating that a product should be able to kill the Coronavirus 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.

For over 20 years, studies and whitepapers have been performed on a DOW formulation (AEM 5700/5772) that demonstrate efficacy against many different microorganisms. The necessary raw materials, specialized generation equipment, and proprietary blending processes used for millions of dollars of this white paper testing by DOW are currently used for building **PreventX 24/7™**.

In order to be completely transparent and not mislead the public, **PreventX 24/7™**, or any

bacteriostatic for that matter, are not approved by the EPA to make any virus claims. The EPA is currently in the process of performing evaluation tests on the compound in **PreventX 24/7™** and are considering different performance standards for testing against viruses. Visit www.epa.org for more information.

The compound in **PreventX 24/7™** is readily available which is bringing a lot of companies to the marketplace. The issue is that, although the compound is available, most companies do not have the necessary equipment and proprietary blending processes to create a product that is fully effective. Our group at HealthCareSynergy has the necessary equipment and proprietary blending processes.

The CDC is clear that the public should use a registered disinfectant that is on List-N. This list can be found on the CDC website.

The benefit of our **PreventX 24/7™** product is that when used after a bleach application (or after other CDC approved disinfectants), surfaces will maintain a durable bacteriostatic, fungistatic and algaestatic surface.

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 **PreventX 24/7™** to protect those surfaces either in-between bleach or other approved disinfectant applications.

Each customer has a choice as to how they elect to protect surfaces against different microorganisms. The use of disinfectants combined with **PreventX 24/7™** is a cost-effective solution especially when surfaces can not be disinfected each and every time there is potential for contamination.

(1) www.epa.gov, Evaluation of Residual Efficacy against Viruses on Surfaces, US EPA

(2) www.epa.gov, EPA Administrator Andrew Wheeler Announces Expedited Pathway for Companies to Claim "Long-Lasting" Efficacy for Antiviral Products, US EPA



PreventX 24/7™ Bacteriostatic Update Connecting Historical Dots

Latest Development About Long-Lasting Antimicrobials

The EPA recognizes that it is not feasible to clean and disinfect surfaces at a frequency required to effectively reduce potential transmission.⁽¹⁾

EPA Administrator Andrew Wheeler said, “While traditional disinfectants only kill viruses and bacteria that are on the surface at the time they are used, surfaces treated with residual antimicrobial products kill pathogens that come into contact with the surface days, weeks, or years after the product is applied.”⁽²⁾

Administrator Wheeler further commented, “EPA is providing an expedited path for our nation’s manufacturers and innovators to get cutting-edge, long-lasting disinfecting products into the marketplace as safely and quickly as possible. As we continue to re-open our schools, workplaces, and other public spaces, it is important Americans have as many tools as possible to slow the spread of COVID-19.”⁽²⁾

The Challenge?

The EPA has never been faced with the challenge to review, test, study and/or approve residual/long-lasting surface protection because they have always had disinfectants that were approved to kill bacteria and viruses on contact. Studies on the formulation used to build PreventX 24/7™ have been performed for over 30 years against a wide array of organisms showing long-lasting surface protection.

So Why Now?

The pandemic has brought the cleaning industry into a new era where technologies, both new and old, must be tapped into to deliver to the public innovation and cost-effective solutions to maintain healthy surface environments.

What is Being Done?

★ The EPA is performing world-class evaluations and testing of products assessing their efficacy and long-lasting claims of killing infectious virus recovery on surfaces with an expectation to develop testing guidelines for product approvals. The majority of the long-lasting products being tested contain the same active ingredient as PreventX 24/7™.

Are There any Results?

The EPA has posted initial findings, which have confirmed that a product with a 0.84% active ingredient, passed the initial screening against an enveloped virus with a Log-3 reduction (99.9%) in 2 hours.⁽¹⁾ SARS-Cov-2 is an enveloped virus. Less than half of the products/formulations tested met the EPA requirements. The initial EPA test demonstrates that the different antimicrobials are not created equal. *Just because a product contains the same active ingredient that is in the formulation of PreventX 24/7™, does not mean that the product will perform and be as effective. This was demonstrated by the EPA with the varying results.*

What is to Come?

The EPA is establishing testing guidelines long-lasting or residual antimicrobials so that each registered antimicrobial can be evaluated and make kill claims against different viruses and organisms. These guidelines will also address how long kill claims can be made after surface treatment. The EPA is finalizing the testing standards which will take time, possibly up until the end of 2021.

What do we do until the end of 2021?

HealthCare Synergy has anticipated this ‘movement’ and will continue to educate our customer base about EPA registered antimicrobials.

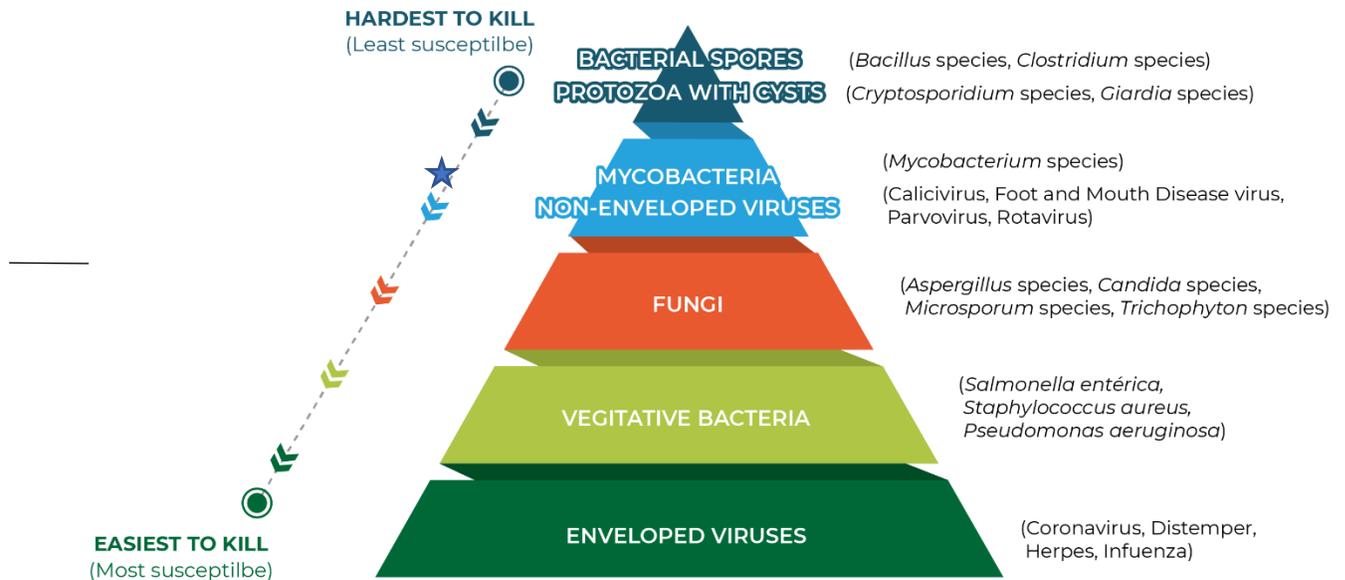
The PreventX 24/7™ formulation (0.84% active ingredient) provides long-lasting surface antimicrobial protection backed by 30+ years of independent studies dating back to the 1980’s when DOW patents on silane-quats were initially issued. The results posted by the EPA continue to align with the history of white papers done on the formulation used to build PreventX 24/7™.

(3) www.epa.gov, Evaluation of Residual Efficacy against Viruses on Surfaces, US EPA

(4) www.epa.gov, EPA Administrator Andrew Wheeler Announces Expedited Pathway for Companies to Claim “Long-Lasting” Efficacy for Antiviral Products, US EPA

Microorganism Susceptibility

HIERARCHY OF SUSCEPTIBILITY



★ DOW studies have confirmed efficacy against several microorganisms identified on the pyramid above. In specific, the study New Antimicrobial Treatment for Carpet Applications demonstrated the effectiveness of the formulation used to build PreventX 24/7™ against mycobacterium tuberculosis and mycobacterium smegmatis along with several other microorganisms. HealthCare Synergy will provide this study upon request.

The Historical Dots

- In the early 1970's Dow Corning, the world's largest manufacturer of silane chemistries, added silane to quaternary ammonium compounds to improve adhesion on a variety of surfaces.
- Multiple Dow Corning patents came in the 1980's along with the birth of a new class of durable antimicrobials (Brought to market as Aegis Microbe Shield) effective against a wide range of organisms.
- To avoid Dow patents, inferior products came to market and exist today.
- The blender of PreventX 24/7™ was selected by Aegis to blend and help formulate specific application processes and has grandfathered rights to purchase Dow Corning's raw materials.
- The necessary raw materials, specialized generation equipment, and proprietary blending processes utilized for millions of dollars of white paper testing by Dow Corning are currently used for building PreventX 24/7™.
- The white paper testing demonstrates long-lasting efficacy against a wide array of organisms, including viruses.
- The EPA is recognizing the effectiveness of silane-quat compounds and understand the overwhelming need for long-lasting surface protection. These documents can be found at www.epa.gov or be provided by HealthCare Synergy.

Be ahead of the curve, connect the dots and make the choice to utilize PreventX 24/7™ on your surfaces.

Market Strength LLC

(3) www.epa.gov, Evaluation of Residual Efficacy against Viruses on Surfaces, US EPA

(4) www.epa.gov, EPA Administrator Andrew Wheeler Announces Expedited Pathway for Companies to Claim "Long-Lasting" Efficacy for Antiviral Products, US EPA