Traditional Disinfectants vs. Antimicrobials

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It's everywhere you turn...in the news, on TV, magazines, the internet...reminders of just how vulnerable we are to bacteria and viruses, and when those stories involve frightening tales of E.Coli outbreaks, drug resistant germs, bed bugs, flu outbreaks, and now, we are in the midst of a global pandemic, it is human nature to want to protect ourselves from risk of infection. But how do we know what products will protect us from whatever germs are lurking on the surfaces and in the air of our homes and in public spaces?

As we stand in grocery store aisles reading labels of products claiming to be the answer, how do we know that our efforts will not be in vain? Do these products work against Covid-19 or the flu? Do we need an antibacterial cleanser or something with bleach? Maybe we need an alcohol based cleaner. When should I use antimicrobial products?

You may have looked for answers to these questions on the internet and may be even more confused than before. Let's try to break down the mystery and clear up the confusion.

What are disinfectants and what do they do?

Disinfectants are products made from chemicals that are applied to surfaces to kill or inactivate microbes. Certain disinfectants may be more effective than others against specific bacteria, fungi, and/or viruses based upon what chemical ingredients are included in the disinfectant.

When choosing a disinfectant, there are a few things to consider, such as what type of microorganism is present, the surface to be disinfected, and the ease of use. Understanding the chemical agent present in the disinfectant will be helpful in choosing the right disinfectant for the application. Most common on the EPA's list of

disinfectants registered to protect surfaces against Covid-19 are ones that contain alcohol, bleach, hydrogen peroxide, and quaternary ammonium compounds, but it can still be difficult to determine which ingredient is best for a given application.

Isopropanol or Ethanol (Alcohol): At a high enough concentration, disinfectants containing alcohol are effective. Most household cleaners that contain alcohol have a 70% solution, but since alcohol will evaporate, these disinfectants become less effective over time.

Quaternary Ammonium Compounds: Research shows that disinfectants with quaternary ammonium compounds are effective at killing bacteria, viruses, and fungi on surfaces. These disinfectants are commonly found on surface protectants including in sprays and wipes.

Sodium Hypochlorite (Bleach): Bleach is considered to be effective at killing viruses, bacteria and fungi on surfaces, but it is also considered to be an irritant when in contact with the skin, so it is advised that gloves are worn when handling products containing bleach and that there be adequate ventilation because breathing the fumes can be harmful.

Hydrogen Peroxide: Compared to bleach, hydrogen peroxide is not as strong of an agent but is still an effective

disinfectant against viruses and bacteria. Some research indicates that it may be slightly more effective than products containing quaternary ammonium compounds at killing some forms of bacteria.

While most disinfectants kill the targeted germs when they are applied to surfaces, they are a one and done phenomenon. There remains the threat that new exposure to microbes can be introduced into the environment when surfaces are touched or when people come into contact with equipment or high touch surfaces, such as light switches, doorknobs, counters, etc.

It is important to note that disinfectants may contain powerful germ-killing agents, they are ineffective if used on dirty surfaces and are not to be considered useful as a method of cleaning. Its main function is to kill and destroy germs but may not clean up residues left behind on surfaces; therefore, it is a good idea to clean the surface to remove dirt and grime before using a disinfectant.

What are antibacterial cleaners and what do they do?

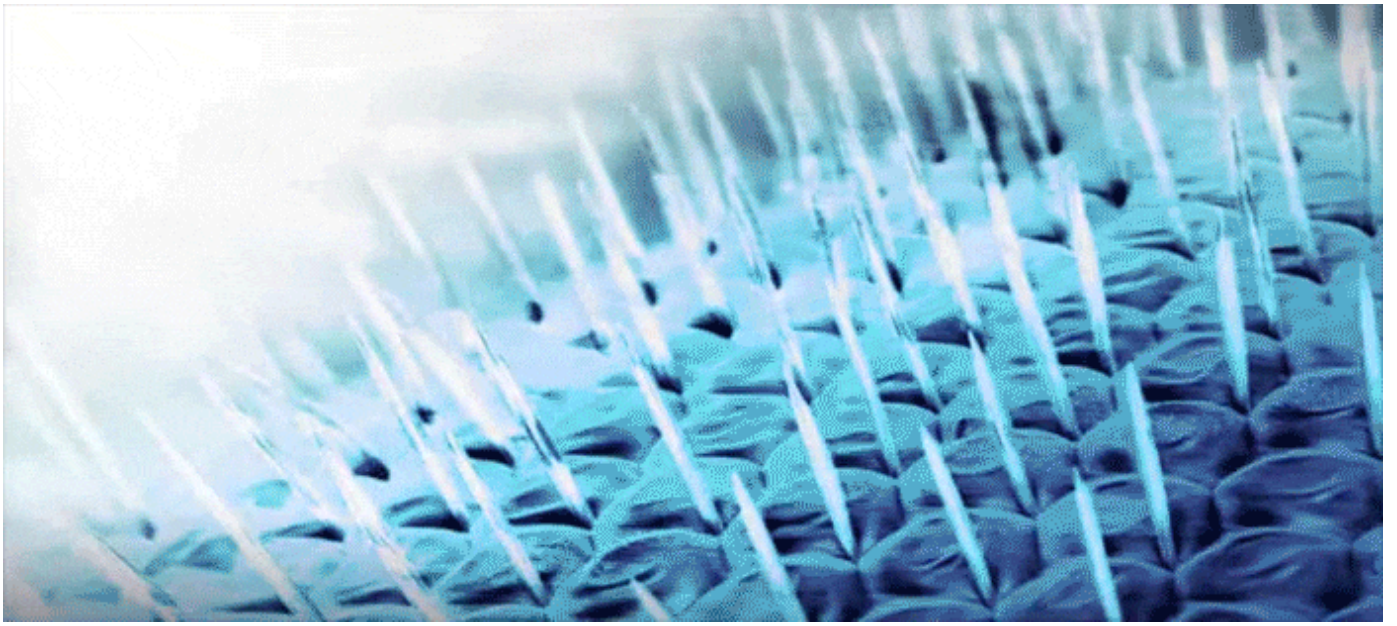
Antibacterial disinfectants offer protection against a broad spectrum of harmful bacteria, including E.Coli or MRSA. They allow for a successful application in a wide variety of

product types, including soaps, detergents, disinfectants, and wipes and usually incorporate the use of silver active ingredients. Antibacterials contain compounds that interfere or halt the growth of new bacteria and effectively eliminates any bacteria living on a surface. While these cleaners are effective in the fight against bacteria, it is important to note that antibacterial cleaners do not target viruses and fungi; therefore, they alone, are not effective against Covid-19.

What are antimicrobials and what do they do?

While similar to other disinfectants in their ability to prevent the growth and viability of microbes, including bacteria, viruses, mold, mildew and other germs, on surfaces, antimicrobials offer a more sustained level of defense than

your traditional disinfectant or antibacterial cleanser. Antimicrobial technologies enable them to continuously inhibit the growth of microbes on surfaces for longer periods of time, and thus, offer a greater level of product protection. Antimicrobial technologies are considered to be safer than other disinfectants on the market that contain harsh chemicals that are extremely toxic and harmful to the environment. Over use of antibacterial products can lead to resistance, adaptation and mutation of bacteria making them difficult to eradicate.



At DIS.IN.FX, we follow the latest in science and utilize the LAST antimicrobial product, which employs a unique misting application process that creates a thin barrier between surfaces and microbes. Through the use of quaternary ammonium silicone compounds, the product is applied uniformly to most surfaces, forming an integrated system bond.

LAST antimicrobial misting is water-based, offering our clients a safer route to disinfection in a wide variety of industries, including medical, education facilities and food related applications.

Antimicrobial technologies, such as LAST antimicrobial products, offers clients a sort of insurance policy against germs, protecting surfaces from the spread and growth of bacteria, viruses, fungi and other germs touch after touch.

In the uncertain times of living in a global pandemic, it is important to turn to the experts at DIS.IN.FX to help to manage the uncertainty of Covid-19 and other viruses in your home and workplace.Whatever your industry, we have the solutions to disinfect and protect against the spread of germs. Don't let germs go viral in your workplace, contact DIS.IN.FX today.