

Sanitizers and Disinfectants: Label Literacy 101

by Virginia Petru

Which is older, the discussion of “Did the chicken come before the egg,” or “What is the difference between a sanitizer and a disinfectant?”

One could debate the chicken question for years while the answer regarding how to kill germs is much easier.

Only “EPAs” are Killers

If a product claims to kill or otherwise mitigate (i.e., prevent, repel, destroy) a microorganism (bacteria, viruses or fungi, except such microorganisms on or in living humans or animals), it is considered a pesticide under federal law and must be registered with the U.S. Environmental Protection Agency (EPA) before it can be distributed or sold.

It’s a violation of federal law to sell a product as a sanitizer or disinfectant for use on hard surfaces without EPA registration, unless the EPA has granted a rare temporary exemption.

Look at the product label — a product that is registered with the EPA must have an EPA registration number printed on its label for the product and for the registered establishment where it was produced.

If the product you are using does not have both EPA numbers somewhere on the label, then it should not be considered a sanitizer or disinfectant.

The set of EPA registration numbers is separated by a hyphen; the first string of numbers indicates the registrant’s identification number and the second set, following the hyphen, indicates the product number.

The other number that will be on the label is the EPA Establishment Number, abbreviated as “EPA Est. No.” This number indicates where the product is

produced and includes a set of codes that consists of the registrant’s ID number followed by the state where the product is manufactured.

Fractional Kill Differential

Basically, a sanitizer kills 99.9% of common bacteria while a disinfectant kills 99.99% or higher (up to 99.9999% - there is no such thing as a recognized 100% kill rate). In some instances, a sanitizer will kill 99.99%, but it’s often referenced as 99.9%.

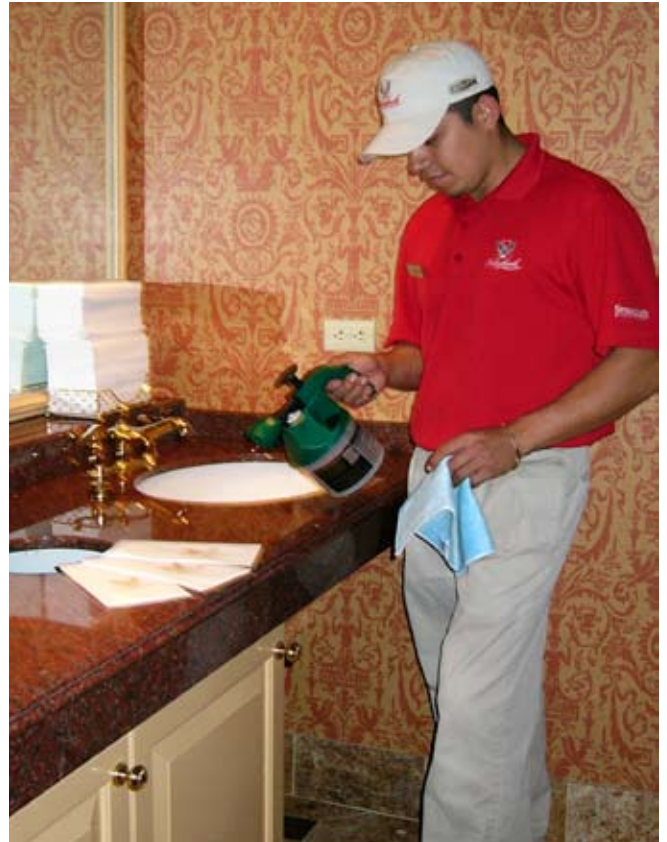
In most cases, a sanitizer is more than adequate to acquire an acceptable microbial kill, as the EPA has stated that a sanitizer reduces microorganisms on inanimate environments to levels that are considered safe by public health codes or regulations. (www.epa.gov/pesticides/factsheets/antimic.htm).

This fact is particularly significant in settings such as schools and day care centers where young children are in contact with surfaces such as desks, drinking fountains, and keyboards.

Using a sanitizer will render these surfaces safe without the danger of exposing children to more harsh disinfectant ingredients.

Many states have recognized the acceptable kill levels of sanitizers in their day care licensing policies and regulations.

All 50 states accept the use of either a cleaner or a sanitizer in non-diaper common areas.



Killing the Right Germs

Read the label carefully, as the EPA requires registered products to list the bacteria, viruses and fungi they will kill. As an example, if you are cleaning a school or nursing home and are concerned with the influenza flu virus, make sure the product you are using is registered to kill that specific virus. It will say so on the label.

Don’t Assume Viral Kill

Not all sanitizers or disinfectants are virucides. The EPA registration for a virucide is a separate registration process that a product must pass to earn the right to claim itself as a virucide. If you are concerned about common viruses such as

influenza, herpes, HIV and HBV, verify the product will kill those viruses by reading the product label.

The One-Swipe Myth

There is no such thing as a “one-swipe sanitizer.”

For a sanitizer or disinfectant (yes, even bleach) to fully perform its kill duties, it must be applied to a surface that has been pre-cleaned

Organic materials that are present on a surface will impact the effectiveness of any sanitizer or disinfectant.

You’ll notice on the labels of EPA registered products, it states to apply the product to pre-cleaned surfaces.

Dwell, Dwell, Dwell

The most common mistake made with either a sanitizer or disinfectant is not allowing enough dwell time once it’s applied.

Anti-microbial products need time to achieve their maximum kill effectiveness.

Just spraying and wiping will not accomplish much more than cleaning with soapy water in regards to killing microorganisms.

How much time is enough time? That depends on the product and its unique formulation.

For example, there are some products that will kill the common staph bacteria within 30 seconds, and then there are some that require 5 or 10 minutes.

It’s imperative you read the label carefully and follow directions to achieve the desired sanitizing or disinfecting results.

New Developments on the Green Front

Recently, the EPA issued a statement clarifying that any regulated microbial product (that is, any sanitizer or disinfectant that is registered by the EPA) is forbidden by federal law to use any type of environmental certification labeling, including Green Seal®.

So, even if a product is Green Seal certified or meets Green Seal criteria, it cannot bear the certification on its label.

Additionally, the product is prohibited from using any Green Seal logo identification in its advertising or collateral material.

This can create a challenge for cleaning professionals wishing to use the most environmentally preferred product, yet have the power to kill microorganisms.

If you are wondering if your product is meeting Green Seal criteria (or has Green Seal certification), you can log onto the Green Seal website at www.greenseal.org.

Although the product cannot display the Green Seal logo, nor can the manufacturer indicate or advertise Green Seal certification, if a product has certification, it may be listed on the Green Seal website.

A list of Green Seal criteria is also available on this website so you can ask the manufacturer for lab results to fairly compare it to Green Seal certified products.

Exciting Disinfecting Advances

Technology has delivered some exciting developments in disinfectants.

Advancements have eliminated some of the harsh ingredients in traditional disinfectants and replaced them with formulations that are more environmentally preferred and have a fresh, mild clean scent.

And, dwell times are becoming shorter with some products delivering full kill within 30 seconds.

24-hour Continuous Kill

Perhaps the most exciting development is a new technology that creates a protective coating on non-porous surfaces and continues to kill the most common bacteria for up to 24 hours.

Products with this new silver ion technology are ideal for schools, day care centers, cruise ships, and long-term care centers.

Once applied according to label directions, they will continue to kill the most common bacteria of Staphylococcus aureus (staph), Salmonella cholerasuis (salmonella), and pseudomonas aeruginosa for up to 24 hours.

Disinfecting Touch Points

Many facility managers are choosing to use a disinfectant to overspray touch points where disease can be spread, such as bathroom stall handles, door handles and knobs, and toilet flush handles.

They are first applying a sanitizer to all surfaces, then applying the more expensive disinfectant just on critical touch-points.

This process saves money without sacrificing the desired level of disinfection.

Choosing the Right Product

In a world with thousands of cleaning products, it is important to do your homework when it comes to choosing what will be in your closet.

For the environmental health of the facility you are cleaning, choose the product that will deliver the desired amount of sanitizing without “overkill.”

Carefully read the label on your products. The information will confirm the abilities of the products and if they are the right fit for your needs.

If you have any additional questions, refer to either the MSDS or call the manufacturer.

With so many advances in technology, it is easy to find the right product for your anti-microbial needs, just read the label.

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