

[Cleaners and Disinfectants]

Defining Biobased Chemicals And How To Disinfect With Green In Mind

Manufacturer Forum takes questions Contracting Profits has received from building service contractors and poses them directly to cleaning industry manufacturers. Each month questions and answers for a different product category will be featured.

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Should building service contractors use green-certified chemicals?

Sawchuk: We believe they should as then it allows them to then compare price at use/dilutions, performance and value provided by their distributor and manufacturer.

Let's apply the analogy of a facility requiring an electrician: Only licensed electricians would qualify and from there, pricing, references, reputation, etc., factor in.

Cleaning chemicals should be treated the same. If all are not certified green, then don't allow them in.

The only exception is where a BSC wants to assume the risk of accepting non-green certified products. Unless they have the time, skill set and receive 100 percent full ingredient disclosure to do a full and comprehensive review, they are at the mercy of the manufacturers and their claims.

Crawford: Depending on the needs for the specific job, a BSC may or may not have the product choice solely to his/her discretion. More and more government and school contractors must abide by product specifications when they are awarded the contract.

It is important to read label ingredients and follow the manufacturers' suggestions dilutions/directions for use. A product may be "green certified," but the category and testing results may not be relevant if the product isn't used correctly.



What is the difference between green and biobased chemicals?

Kaufold: Green chemicals are those with reduced human health and environmental impact. Biobased chemicals are those derived from renewable (non-petroleum) based sources (plants and animals). Some green chemicals are biobased and some are not. Some biobased chemicals are green and some are not. This is a distinct case where a third-party green certification will help determine the appropriate trade-off.

Daggett: "Green" is a fuzzy term that can mean a lot of different things. Sometimes it relates to human toxicity. Sometimes it relates to biodegradability or aquatic toxicity...products that prevent waste. And it could just mean products that have been certified by a third party.

Biobased chemicals, however, are pretty well defined by the U.S. government. Just because something is biobased doesn't make it green. Chemicals from plants or animals can be toxic. Some chemicals can be derived from either plants or petroleum, but they are the same exact molecule. Further, some chemicals are made by combining petroleum and biobased components into one material.



Many customers ask that BSCs use a green disinfectant, but no such product is currently available. What can BSCs tell clients?

Kaufold: Disinfectants are designed to kill, hence, they are not considered "green." Disinfectants, however, are necessary in specific applications, such as an operating room. This is where product usage and facility priorities come into play. The BSC needs to work with the facility to identify what kill claims are necessary and determine what types of products carry those claims. From there, the BSC can try to find the "greenest" product.

The greenest option may include a neutral pH (safer for the worker than something highly alkaline), low or no VOC (improves the indoor air quality for building occupants), or no phosphates (that can be harmful to aquatic life).

BSCs should also consider the intended product use. Infection control through disinfectant use is important in high contact areas (door handles, faucets, etc.). Low contact areas, like floors, may be better served with a good cleaner. The BSC should be willing to discuss these alternative cleaning options, as well as alternative chemical options, with the facilities they service.

Sawchuk: Even though in the United States there are currently no green certified disinfectants (as not allowed by EPA), BSCs should review and compare the following attributes in disinfectants and advise their customers of that fact and why they are using a particular disinfectant.

First, look for disinfectants that do not contain nonylphenol ethoxylates (NPEs) or octylphenol polyethoxylates (OPEs) and have a pH value close to 7. Second, compare level of detergency (cleaning ability; higher is better). Third, look at the parts per million (PPM); the higher the better. Fourth, look to ensure the disinfectant has any required kill claim. For example, if the customer is concerned about swine flu (H1N1), ensure that specific kill claim is on the label. Lastly, look for a disinfectant with very broad kill claims.

More importantly, advise the customer that you will not be overusing disinfectants, and when you do use them, it will be with proper procedures — pre-clean, apply disinfectant, allow required dwell/wet time, rinse or wipe dry as per label instructions.



Ingredient disclosure is a new movement in the cleaning industry. Should ingredient listings be made available to consumers?

Daggett: We are in full support of the trend for ingredient disclosure. However, we've observed that it is often difficult to get customers to engage in the technical discussions regarding the sustainability of cleaning products due to the complex nature of the material. Therefore, we are concerned that ingredient disclosure falls short of the true transparency around the health and environmental profiles of cleaning products. We are more in favor of systems that go beyond ingredient disclosure by providing sustainability disclosure.

There are three tiers of transparency around green products:

1. Third-party certification, which offers a guarantee of a certain degree of performance with no homework involved;
2. Manufacturer-provided assessment of the health, environmental, safety and sustainability impacts associated

with a product — this often requires some homework on the users part; and

3. Ingredient disclosure, which requires the user to be a chemist, toxicologist, environmental scientist and engineer to understand the sustainability of the product in question — typically an unrealistic homework expectation.

BSCs should be provided the right information to meet their sustainability needs. While ingredient disclosure plays a role in that effort, it falls short of the data required to fulfill the triple bottom line of people, planet and profit.

Crawford: I think an informed consumer is the best customer. People who are not familiar with chemical names can get the wrong impression about some additives that are considered "safer" than traditional cleaning ingredients. Oxygenated cleaners, for instance, such as hydrogen peroxide, and chlorine dioxide may seem like harsh ingredients, but with the right combinations, provide an excellent basis for cleaning products.

Someone might see the word "chlorine" and immediately associate it with bleach. Ethoxylated alcohol is in a product, when in fact, it is such a minute amount and functions as a wetting agent that is used in many healthcare products. ☐

For additional answers to these questions and more manufacturer insight on low-VOC products and biobased ingredients, visit www.cleanlink.com/cp

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