

In the broad world of cleaning products, few subjects spur as much confusion as the differences between sanitizers and disinfectants. Both appear to eliminate germs and seem desirable products for a janitorial worker to use. For janitorial workers and the individuals who purchase their supplies, understanding the differences between sanitizers and disinfectants is more important than most realize.

Jeff Heeren, marketing manager for RJ Schinner, a re-distributor, is a believer in understanding the differences. “By definition, there are reasons for disinfecting and reasons for sanitizing,” Heeren says. “For example, in the healthcare arena, where the environments have a lower tolerance for bacteria to protect patients, disinfectants may be required.”

According to the EPA, a disinfectant eliminates or inactivates human-disease causing microorganisms or pathogens, which is why a disinfectant is good for hospitals. The bottom line, disinfectants target bacteria and eliminate viruses. Where removing bacteria is important, but eliminating all disease-causing germs isn't, a sanitizer will suffice. The EPA defines sanitization as reducing bacteria on surfaces. To be a registered sanitizer, the product must eliminate 99.9 percent of bacteria when compared to an untreated surface.

“On a broader scope, you use sanitizers to reduce bacteria count when 100 percent kill is not necessary,” Heeren notes. “In general, sanitizers reduce the risk of potential for cross-contamination because sanitizers reduce bacteria count instead of killing them completely.”

If it only went as far as understanding the general definitions, knowing when and how to use the products would be simple; unfortunately, that's not the case.

EPA guidelines designate three disinfectant categories. Limited efficacy disinfectants comprise the first and are effective against a specific major group of microorganisms only. For instance, some disinfectants only target gram-positive or gram-negative bacteria. To prevent the spread of E. coli, a disinfectant intended for gram-negative bacteria is ideal. But, for Staph infections, a disinfectant that targets gram-positive bacteria is better.

General or broad-spectrum efficacy disinfectants are the second category and the most popular since they target both gram-positive and gram-negative bacteria. Hospital or medical environment efficacy disinfectants are effective for general or broad-spectrum disinfection and against the nosocomial bacterial pathogen *Pseudomonas aeruginosa*, which accounts for nearly 10 percent of all infections in U.S. hospitals, according to CDC.

Sanitizers are generally divided into two categories: non-food contact sanitizers and food contact sanitizers. According to the EPA, non-food contact sanitizers include items like air sanitizers, carpet sanitizers and bathroom sanitizers. Food contact sanitizers remove bacteria from surfaces like eating utensils, dishes and surfaces in food-processing and food service situations.

Once cleaning professionals understand the differences between sanitizers and disinfectants and the sub-categories under each group, they can turn their attention to implementing guidelines. Here are some basic guidelines for applying sanitizing and disinfecting products:

- Use products as directed. End-users may try to tamper with the product for a variety of reasons. Cleaning professionals may, for example, try to dilute the sanitizer or disinfectant in an effort to save money, only to cause the product to have partial or no germ-killing benefit.
- Avoid mixing chemicals. Make sure customers don't try to create their own disinfectant by adding chemicals to a non-disinfecting cleaner. Only EPA-approved products should be used for disinfecting and mixing can be dangerous.
- Look for warning labels. Beware of advertisements touting a safe disinfecting product that doesn't need warnings. All EPA-registered products require a warning statement on the label. If there is no warning statement, the product is not EPA-registered nor approved for use.
- Disinfectants and antibiotics are different. The efficacy of disinfectants on antibiotic-resistant organisms may confuse some customers. The truth is disinfecting products kill these organisms in a completely different way than antibiotics. As long as the EPA approves the testing and end-users follow label directions for the specific antibiotic resistant organism, disinfectants are effective in killing them.
- Cleaning implements play an important role. The active ingredient in the product kills the germs, but using contaminated implements (sponges, cloths, mops, etc.) can reapply germs to clean and disinfected surfaces. Cleaning professionals should replace the implement on a schedule appropriate for the location and situation.