

Video Clips: Bringing down the dirt with FloraLife

This is a special feature from *PAX Tech's July Cabin Hygiene, Seating & IFEC 2020* [edition](#).

Mark Allen, Global Product Manager at FloraLife, discusses how the FloraLife products work with *PAX Tech* Editor Jane Hobson

Airlines globally are on the hunt for cabin interior products that support the effort to make passengers feel confident and comfortable enough to fly. Established in 1938 with the invention of the flower food packet, South Carolina-based [FloraLife](#) has expanded beyond its flower care focus to introduce products to address these changes in hygiene expectations.

The company has more than 80 years of experience in microbiology research and has been in the floricultural and disinfectant business for 29 years. At its corporate headquarters, the facility houses sales, manufacturing, warehousing and research under one roof. From this stronghold it has developed Environmental Protection Agency (EPA) registered disinfectant cleaners that appear on EPA List N and are approved for use against the SARS-CoV-2 virus.

"At the onset of the pandemic, we expanded beyond our flower care focus to provide a variety of industries and consumers [with] cleaning products to address the increased cleaning norms," Mark Allen, Global Product Manager, tells *PAX Tech*, adding that the company's purchasing [website](#) launched in late-March 2020.

The EPA registered products, FloraLife® D.C.D.® Cleaner and FloraLife MicroBLOC®, are both disinfectant, cleaner, sanitizer, bactericide, virucide, fungicide, mildewstat and deodorizer. They are available in a concentrate to be diluted by the user and a ready-to-use spray refill container. FloraLife D.C.D. Cleaner doubles as a one-step cleaner disinfectant due to additional detergents in the formula. These products are for use on hard non-porous surfaces throughout the aircraft cabin, such as walls, floors, ceilings, shelves, galleys and stowage bins.

"Combined with proper cleaning protocols, our hospital grade line of EPA-certified disinfectant cleaners not only get the job done but will leave a transparent film that allows for residual effect for at least 24 hours," Allen says. This transparent film exists due to a set of EPA-listed chemical formulations based on Quaternary Ammonium Compounds – simply called Quats – as the active ingredient in the FloraLife disinfectant products, he explains. "Due to the activity on 'oily' or 'fatty' surfaces, these chemistries disintegrate the membranes of microorganisms thereby inactivating them. Therefore, these chemistries clean, sanitize and disinfect at the same time."

"We never saw ourselves diversifying, moving outside the floral industry, but we've got PhD scientists that have studied microbiology for all their life" - Mark Allen, Global Product manager, FloraLife

The dirt on hand-washing

FloraLife also recently developed the SOAP line. Available in liquid and powder forms, fragrance-free SOAP is individually packaged in single-use packets inspired by FloraLife's flower food packet packaging technology. SOAP is ideal for travel kits; made from natural vegetable oils, it won't dry out hands, it contains the right amount of soap to wash hands on the go, eliminating the need to touch public soap dispensers. The packets are lightweight, small and easy to carry and store. The packets

are also easily and safely shareable.

“Although disinfectants, lotions, and potions all containing more than 60 percent alcohol can be helpful, nothing quite does the job like soap can,” Allen says, explaining that soapy water destabilizes the components holding the virus together, breaking it down. Soap contains fat-like substances known as amphiphiles, some of which are structurally very similar to the lipids in the virus membrane.

“Much in the same way soap works to remove dirt from your skin, soap not only loosens the glue between the virus and the skin, but also the bond-like interactions that hold the proteins, lipids and RNA in the virus together. The virus is broken down and washed away,” he says.

SOAP packets can be purchased [online](#) and shipped globally or by contacting a FloraLife representative.



FloraLife SOAP Power Hand Soap packets

Cleaner, sanitizer or disinfectant?

“There seems to be some confusion and a lot of misuse between the words cleaner, sanitizer and disinfectant,” Allen says. “In short, sanitizers reduce bacteria on a surface by at least 99.9 percent. Disinfectants kill a wider range of microorganisms than sanitizers, and cleaners simply remove dirt, soils, and impurities from surfaces.”

Here’s another breakdown based on information supplied by FloraLife:

EPA Certification: In the US, sanitizers and disinfectants are regulated by the EPA and must be certified through a process that tests the product to meet certain pre-defined criteria. By law, a chemical product cannot be labeled as a sanitizer or a disinfectant unless and until it is EPA-certified.

Germ Specificity: Both sanitizers and disinfectants must be tested against specific germs. Chemical labels must list out each and these germs individually. Sanitizers are certified for bacteria only, while disinfectants can also be certified to kill viruses, mold, mildew, and fungi.

Time to Kill: The time it takes to kill germs is one more factor that is important when evaluating both sanitizers and disinfectants, and this must also be listed on the product label. Some chemical formulas kill respective germs in five minutes and others in one minute or less. This is called "dwell time" and should be taken into account when choosing and using sanitizers and disinfectants for various applications.

Cleaners Remove Dirt: Cleaners are simple and straightforward. They represent a broad category of products that use soap or detergents to physically remove dirt and soil from surfaces. Cleaning does not kill germs. It simply removes them. The EPA does not test or regulate cleaners for effectiveness. That being said there are definitely different qualities and strengths of cleaners.

FloraLife product format:

- FloraLife® D.C.D.® Cleaner concentrate in varying sizes: 16-ounce up to 264-gallon tote. Diluted at 2 ounces/1 gallon of water
- FloraLife® MicroBLOC® concentrate in varying sizes: 1 gallon up to 264-gallon tote. Diluted at 2 ounces/ 5 gallons of water
- FloraLife® D.C.D.® and FloraLife® MicroBLOC® come in ready-to-use formats of 32oz sprayers and 1-gallon refill containers (1 gallon or less sold by case, larger sizes sold in units)
- Liquid and/or powder SOAP packets: 3-milliliter liquid or 1-gram powder packets, 50-pack consumer cartson, 150-pack display boxes, 2,000-pack bulk boxes