

GymValet®

Holder for Sanitizer Spray Bottles and Towels

BASIC THEORY BEHIND THE SAFETY OF THE REUSABLE TOWEL

- Virus particles are very easy to inactivate on hard surfaces. It's once they get into the body that you have a big problem. That's why continual sanitizing of body contacted surfaces—before and after use—is so important. If you want to prevent virus spread in the gym, nip the problem at (potentially) the last source of contact before the virus can enter the body—the hard, body contacted, surfaces of equipment. That's where a good, conveniently located sanitizing system comes into play/necessity—with a high quality sanitizer and a way to wipe the surface (mostly) dry. [Air drying of wetted surfaces has its place in the industry; that concept will not be addressed in these bullet points].
- The mechanism of action for hospital grade broad spectrum sanitizing solutions is to “dismantle” (break apart) virus and germ particles when applied to the surface(s) to be sanitized. For the fitness industry, the most effective and safe sanitizing active ingredient is Quaternary Ammonium. The most challenging part of neutralizing virus and germ particles on hard surfaces in the fitness center setting has been the effort to comply with the EPA's “dwell time” standards for effectively inactivating virtually all of the virus particles (the pathogen everyone is/should be most concerned about at this time) on hard surfaces which is [has been] reported to be anywhere from two to five minutes, up to 10 minutes! If you are unfamiliar with the term *dwell time*, it is the time the “wet” solution must be in contact with the surface to be sanitized before it is wiped off. The reality is that this is very hard to accomplish in the fitness center setting, (or in the community setting in general) as machines turn over very quickly—rarely is there the luxury of waiting 2-10 minutes before wiping the solution off between users. **BUT**, there is exciting new news, based on a research study published on November 28, 2020, on Quats.' effectiveness in inactivating enveloped viruses from the SARS-CoV-2 virus family (that would include COVID-19) in the “real world” setting—i.e., not complying with EPA certification standards for 1) pre-cleaning surfaces, and 2) using non-hard water to dilute the Quat.—that showed **complete inactivation** of the virus occurred within 15 seconds of contact!! Now, the new best practice recommendation for equipment sanitizing in the fitness center setting should/can be: Spray on, count to 15, wipe off. No need to enforce a “10 minute dwell time” when using Quats. in regards to COVID-19 neutralization; inactivating enveloped viruses on hard surfaces is easy and fast with Quats!
- Virus particles are very small (millions could fit on the head of a pin) and they are not alive; that's why the word “kill” is not quite appropriate when referring to eliminating virus particles. High quality sanitizing solutions/products break-up the virus particles by chemically disrupting the lipid containing outer shell of the particle, and/or neutralizing the protein molecules inside the particle. In any case when the particle is “dismantled,” it is rendered ineffective—and cannot be “magically” reassembled lying in pieces-parts on the disinfectant wetted surface or when picked up by the wiping “instrument” such as a towel, disposable wipe or paper towel.
- When the dismantled particle(s) are wiped into the fabric matrix of a towel they are wiped into the towel WITH the sanitizing solution that was applied to the surface. The residual wetness feel of the towel is generally the wetness of the sanitizing solution that remains on the towel. Remember the “dwell time” concept mentioned above, that research has recently shown to be about 15 seconds for enveloped virus particles...well, the dismantled particles/sanitizing solution “combination” absorbed into the towel can and should be considered to be on the dwell-time clock (dismantled and neutralized!). And, don't forget that that same towel will, generally, soon be used again to wipe up more sanitizing solution and dismantled virus particles. What you have is a perpetually solution-wetted towel matrix that has dismantled/neutralized/inactivated particles in it—with an extended dwell time, beyond the 15 seconds the new research has shown to be effective, being “applied” to the particles as long as the towel remains at least somewhat wetted. If, after its last use, the towel dries out (before its next use) consider it to be very clean. **Bottom line: The reusable towel is clean; possibly the cleanest and safest surface in the fitness center.**