
ENDEX-99TM

Fabric Sanitizer

TECHNICAL DATA – Zone of Inhibition

What you should know

Used in the final rinse, sanitizers and bacteriostatic fabric softeners go beyond producing clean textiles. These products bond to the fabric a layer of bacteria-inhibiting quaternary ammonium compounds.

- ★ The active ingredients in our sanitizer *continue* to kill bacteria and odors while helping to prevent cross-contamination throughout the use, collection, soil-sorting and rewashing of the textiles. Bleach stops working once the textiles are removed from the wash.
- ★ Bacteriostatic finishing insures that textiles are not only clean when they leave your plant; they are clean when your customer puts them into service.
- ★ These products offer a unique type of protection to workers who handle contaminated linens, as well as to the users of the textiles.

USING AN EPA REGISTERED, RESIDUAL, SELF-SANITIZING FINISH FOR HEALTHCARE TEXTILES

Reducing the incidence of cross-contamination in the healthcare setting is a primary objective of all cleaning processes, especially healthcare laundry. Killing bacteria in the washwheel is the first step in creating a “safety zone”. If the proper procedures are followed, and the proper chemistry is utilized, the medical textiles should emerge from the washwheel “hygienically clean” (although there is not one universally accepted definition of this term, one commonly used is free of vegetative pathogens).

Medical textiles begin the recontamination process virtually the instant they are removed from the washer. They are handled by employees, placed into potentially contaminated carts, handled by workers wearing contaminated garments, staged in hallways where patients roam – and finally put in to service where they will be contaminated with bodily fluids and every imaginable form of bacteria, virus and spore.

In this contaminated state they will be collected – by hand. Frequently stored temporarily in hallways, elevators, storage rooms ... and then ultimately transferred back in to the laundry – by hand. The opportunity for cross-contamination is greatest here – not in the washwheel. You need protection at the use-sites!

It has long been known that the use of an EPA Registered textile sanitizer with residual, self-sanitizing capabilities will create a ZONE OF INHIBITION¹ on the surface of the fabric. This will kill 99.9% (at minimum) of newly acquired bacteria. Using a product like this, in addition to good and hygienic laundering practices, will insure that you are not only getting clean textiles out of the dryer but that you are significantly reducing the incidence of cross-contamination for patients, visitors and employees, during the use-cycle of these textiles.

Transfer of the antimicrobial by skin contact has already been shown to be undetectable in the case of the most thoroughly-studied antimicrobial in the market.

¹ AATCC TM1479 is a qualitative, zone of inhibition test adapted from the Kirby-Bauer test used in the medical field for decades. Both JIS L 1902 and ISO 20743 have qualitative sections modeled on AATCC TM147. The bottom of a Petri dish is filled with nutrient agar that is streaked with the organism of interest. The test sample, a strip of fabric, is then placed over the streaks. For textile substrates AATCC Test Method 147 is used, where a length of fabric is placed across a series of five streaks on a pour plate. After incubating for 24 hours, the technician measures the width of the zone of inhibition to either side of the sample at the top streak. The GSA uses AATCC Test Method 174, Part I for qualitative testing of carpet. For solid plastic articles, a plate is streaked to provide a lawn, a cut piece of sample is placed on top of the streaked organism, and the sample is incubated for 24 hours. The technician then measures the average width of the zone of inhibition around the sample. Some antimicrobials, such as silver and quaternary ammonium silanes, have efficacy at the surface but do not diffuse at high enough rates to give a zone of inhibition.