

INITIAL REFLECTIONS

Up to now, there are only 3 courses of action for achieving long-term surface protection:

Silver Citrate

Disinfectants

Perpetual Disinfection



This would entail hiring enough staff to follow each occupant around the facility and disinfecting each surface after it has been touched.

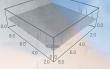
The Disadvantages:

This is both costly and, depending on the choice of disinfectant chemistry, potentially more hazardous than the actual germs being fought.

These formulations blend a traditional quaternary ammonium salt with silver nanoparticles and citric acid, and although less perpetual, also need a continuous workforce applying them. **The Disadvantages:**

Nanosilver must be 'consumed' by bacteria to be destroyed (heavy metal leaching and build-up), it only works for 24 hours and requires expensive daily reapplication.

Silane Quaternary Salts



This material creates a physical barrier in the form of a 'bed of nails' that physically ruptures the membrane of microbes.

The Disadvantages:

Developed in the late 70's, this microscopic field is also a barrier to effective soil-removal, since any 3-dimensional surface is harder to clean than a flat, smooth surface.

PRESENTING THE ZShield24™ CHITO FAMILY OF PRODUCTS

Introducing **ZShield24**tm, the ultimate innovation in all-natural, long-term antimicrobial-biostatic surface protection. These products are based on the active ingredient Chitosan, recognized for its outstanding antimicrobial and biostatic properties and derived from Chitin, a naturally-occurring biopolymer extracted from the exoskeleton of crustaceans like crabs, shrimp and lobster. Chitin:

- Is non-toxic*, inert, abundant, renewable & biodegradable (*as defined by OSHA Code 29 CFR 1910.1200).
- Can be applied to food-contact and non-food contact surfaces (as defined by EPA Code 40 CFR 180.940, 960).
- Doesn't harm people, pets, livestock, wildlife or the environment (as defined by EPA Code 40 CFR 180.930).
- Is listed by the EPA as a FIFRA-exempt, non-hazardous component (link to listings available upon request).

Slight variations in concentration and formulation yield different products to protect surfaces, clothing and hands.



A dirty surface harbors microorganism, so thorough cleaning is the first step to a safe surface. Once clean and disinfected, it would be **"ideal"** that it stayed safe as long as possible. **ZShield24tm** is making **"ideal"** a reality for home or small facilities, protecting between reasonably scheduled cleaning and disinfection, and providing protection from recontamination for up to 7 days.

Proposed Method for Surface Maintenance:

Clean surfaces (consult the Cleaning Tips and Tools in the right column). Wipe or air-dry. Wipe on **ZShield24tm** weekly (see directions).

Directions for Applying Treatment to Surfaces:

- Wet and wring a clean microfiber cloth or pre-hydrate a viscose cloth to reduce ZShield24tm consumption and improve coating uniformity.
- Dispense ChitoShield onto the damp cloth using the convenient flip-cap in the quart bottles. This will render it antimicrobial-biostatic and make it ready for aggressively wiping porous and non-porous hard surfaces.
- ZShield24tm will continue to maintain low-traffic surfaces biostatic for up to 7 days. Use ZShield24tm for the targeted retreatment of critical touch points, multiple times per day, like door knobs and handles, stair hand-rails, elevator buttons, bathroom fixtures and more.

THE ZShield24™ CHITO FAMILY OF PRODUCTS

Since the active ingredient in our **ZShield24**tm family is approved by the FDA for use in food, drugs and cosmetics, **ZShield24**tm is currently developing a hand protective coating that will bring the same Biostatic Defense to skin. While endurance testing is currently underway, a single spray worked into your hands should continue to offer active biostatic-antimicrobial protection for 24 hours.



To keep surfaces clean, use microfiber or viscose **ProTab™** cloths (lint-free) to wipe using the residue-free **CLEANING SOLUTION** produced with **Envirotab™** tablets or the residue-free **DISINFECTING SOLUTION** using **ProDox™** tablets.

CONTACT FOR MORE INFORMATION AND PURCHASES

https://zshield24.com info@zshield24.com



KEY ZShield24[™] CHITO CHARACTERISTICS





Larger facilities take longer and require more labor to clean/disinfect and deem safe, so any manager would be grateful for not having to run through them so often. The professional applicators could be more successful offering a service that would guarantee longer protection, being able to land more jobs with more clients. **ZShield24+™** is revolutionizing the market with non-toxic chemistry for the workforce, bi-monthly or quarterly general applications, and monthly touchup of frequent contact points

Proposed Method for Surface Maintenance:

Clean surfaces (consult the Cleaning Tips and Tools in the right column). Wipe or air-dry. Apply **ZShield24+™** with an ULV or Electrostatic Sprayer (see directions).

Directions for Treating Surfaces:

- Schield24+™ is available in large presentations (pail, gallon and drum), better suited for filling the tanks of applicators like ULV or Electrostatic Sprayers to obtain a thin, even coat on all surfaces without waste. Solve puddling or saturation by wiping the surface with a water-dampened microfiber cloth.
- Shield24+™ will continue to maintain low-traffic surfaces biostatic for 30 to 60 days.

Directions for Treating Clothing:

Add 1 cup (8 oz) to the final rinse cycle of a washing machine. Test for color-fastness before using on all textiles. Clothes will be biostatic-antimicrobial for 50 wash cycles.