



TOTAL FACILITY DISINFECTION PROGRAM

WE HAVE YOUR OPERATION COVERED

A food production facility's master sanitation schedule often calls for periodic intensified cleaning that supplements daily cleaning, disinfection and sanitation routines. These "deep cleans" can be triggered by positive microbial results or may be part of a routine preventative maintenance schedule.

Periodic, "non-routine" sanitation events may include:

Periodic "Total Facility Disinfection Events"

Shock the entire facility with a deep disinfection/biofilm removal* treatment to eliminate all harborage niches from the facility to bring the plant to a new microbial "baseline."

Seasonal Processing

Harvest-season produce processing, line additions and changes for seasonal food products

Cooler & Storage Clean Outs

Areas such as grading and sorting coolers, distribution centers and product holding areas

Construction

New facility builds or expansions, line additions, planned and unplanned maintenance events, equipment installs

Emergency/Disaster

One-off events such as flooding will require several remediation steps, including microbial disinfection.

Sterilex's proprietary PerQuat®-based disinfectants and biofilm removal agents are specifically designed to eliminate microbial harborage and remove biofilm in your facility.* It can be used to disinfect specific processing rooms that may be affected by any of the activities mentioned above or to shock treat complete processing facility on a periodic basis in a cost-effective manner.

BENEFITS SUMMARY

A total disinfection application with Sterilex products results in the following benefits:

Total Facility Microbial Baseline

- o Disinfect, kill biofilm bacteria and remove biofilm* in areas not regularly scheduled for sanitation cycles
- o Eliminates microbial harborage niches throughout your entire facility to reach a new level of facility cleanliness

Higher yields due to microbial reduction in areas not routinely cleaned

- o Less product on hold, downgraded or discarded due to microbial contamination

Improved Regulatory Compliance

- o Inspector, auditor, and customer satisfaction with a "best practice"
- o Proven disinfection tool in the food safety plan

Confidence in Your Process

- o Chemistry specifically designed for disinfection in food manufacturing environments
- o Total facility disinfection in a manner that is less expensive than other products currently in use, compatible with most equipment and facility surfaces** and compatible with wastewater systems

* Kills 99.9999% of *Pseudomonas aeruginosa* and *Staphylococcus aureus* in biofilms. Biofilm label claims are approved for specific applications only. See product label for full label claims and usage instructions.

** See compatibility chart for list of compatible materials.

RECOMMENDED PROTOCOL

A total facility disinfection application with Sterilex PerQuat technology aims to eliminate microbial harborages and bring your facility to a new microbial baseline. The total facility disinfection event includes multiple, consecutive treatments (often over the course of a weekend) of all surfaces not on a routine cleaning schedule, or treatment of the entire facility. For best results, this protocol should be repeated 3–5 times over the course of a weekend.

Preparation

1. Treat all surfaces with an alkaline detergent, followed with a water rinse.
2. Identify potential harborage niches and biofilms utilizing Indicon® Gel, noting hot-spots.***
3. Rinse Indicon Gel from surfaces.

Total Disinfection Application

1. Prepare solution of Sterilex Ultra Disinfectant Cleaner Solution 1 and Ultra Soft Metal Activator** mixed at a 1:1:8–1:1:10 ratio (12.8–16 oz of each solution/gallon of water) for use in a high volume, rinsed tank foamer. Use Sterilex product solution within 8 hours of mixing. **Note:** For high foam applications, replace Ultra Soft Metal Activator with Sterilex Ultra Activator and mix at 1:1:2 ratio.
2. Generously foam all overheads, walls, equipment, floors and drains to ensure thorough coverage. Allow chemistry to soak in all crevices of treated surfaces
 - a. Minimum contact time: 10 minutes
 - b. Recommended Contact Time: 30 minutes
 - c. Water Temperature: 100°F to 140°F
3. Rinse all surfaces thoroughly with a potable water rinse.

Verify Results

1. Re-apply Indicon Gel to hot-spots identified prior to the total facility disinfection event to verify the elimination of biofilm harborage niches.
2. Verify removal of biofilms* from said niches.
3. If Indicon Gel indicates the potential continued presence of a biofilm harborage niche, reapply Sterilex Ultra Disinfectant Cleaner Solution 1 and Ultra Soft Metal Activator to trouble areas then follow with a final sanitizer.

FOGGING

Food manufacturing facilities can supplement the total disinfection program by periodically applying Sterilex Ultra Disinfectant Solution 1 and Sterilex Ultra Soft Metal Activator as a fog. Fogging can help penetrate otherwise difficult to reach spaces with powerful PerQuat chemistry.

1. All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging.
2. Remove or carefully protect people, food products and packaging material prior to fogging
3. Calculate product requirements. One gallon of use solution is used per 4000 ft².
4. Mix 2–4 oz of Sterilex Ultra Disinfectant 1 and 2–4 oz of Sterilex Ultra Activator per gallon of water (1:1:32–1:1:64). **Note:** Once mixed, product must be used within 8 hours.
5. Apply fog by following fogger manufacturer's directions for use.
6. Vacate fogged area for a minimum of 2 hours after application.
7. Thoroughly rinse all surfaces with a potable water prior to reuse

RECOMMENDED PRACTICES FOLLOWING TOTAL FACILITY DISINFECTION

Daily

Use Sterilex Ultra Step, an EPA-registered solid floor sanitizer, on production floors, in hallways and on top of drains to kill food pathogens such as *Listeria*, *E. coli*, and *Salmonella* between sanitation applications.

Weekly

Sterilex Ultra Disinfectant Cleaner Solution 1 and Ultra Soft Metal Activator should be used at least 3x/week in RTE facilities and at least 1x/week in other areas to control biofilms.

Periodically

Revisit total disinfection events in accordance with your facility's master sanitation schedule.

*** Request Sterilex Indicon Gel Program for information.

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METAL COMPATIBILITY REFERENCE

Compatibility chart for dilutions of Sterilex Ultra Disinfectant Cleaner Solution 1 and Ultra Soft Metal Activator. Compatibility testing conducted for 10 consecutive days (14,400 minutes of use). Simulates 5.5 years of daily treatments.

Metal	Compatibility	Plastic	Compatibility
Aluminum 1100	Compatible	HDPE	Compatible
Aluminum 5052	Compatible	LDPE	Compatible
Aluminum 3003	Compatible	Polyethylene	Compatible
Aluminum 7075	Semi-Compatible ¹	Polypropylene	Compatible
304 Stainless	Compatible	PVC	Compatible
316 Stainless	Compatible	Teflon	Compatible
Bronze	Compatible	Kalrez	Compatible
Copper	Compatible	Delrin (Polyacetal)	Compatible
Brass	Semi-Compatible ²	EPDM	Compatible
Carbon Steel	Semi-Compatible ³	BUNA-N	Compatible
Cast Iron	Non-Compatible ⁴	PET	Compatible
Galvanized	Non-Compatible ⁵	Viton	Semi-Compatible ⁶
		Polycarbonate	Non-Compatible ⁷

¹Light oxidation

²Some darkening of surface

³Minimal rusting observed, same compatibility as water

⁴Can cause rusting on clean cast iron surfaces over time

⁵Corrosion, same compatibility as water

⁶Causes material tackiness after 3 days of continuous exposure (4,320 minutes)

⁷Causes material decomposition

Sterilex EZBlend System

The Sterilex EZBlend® System is a complete system that dispenses, blends and applies two-part Sterilex products at the labeled use rate. This color-coded, user-friendly system keeps Solution 1 and 2 products separate until foamed. The Sterilex EZBlend System is distributed by FOAM-IT.





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