

TORAYSEE™ PCS 5000 OXIDIZING DISINFECTANT CLEANING PROCESS AND COST OF USING ONE TORAYSEE™ PER DAY.



PROCESS

Materials

- Small oblong or square container with lid
- 250 mls of PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner
- Toraysee™ cloth
- Bucket with rinse water

How to reuse

- Rinse cloth with water squeeze out liquid
- Replace cloth in PCS 5000 Oxidizing Disinfectant Cleaner
- PCS 5000 Oxidizing Disinfectant Solution disinfects Toraysee™ and saturates cloth for next use

To clean delicate or chemically sensitive surfaces

- Remove Toraysee™ from PCS 5000 Disinfectant solution
- Squeeze out liquid
- Rinse cloth in water and squeeze out liquid from cloth
- Wipe delicate surfaces or equipment with damp Toraysee™

PROCEDURE

- Add 250 mls of PCS 5000 to the container, add Toraysee™ cloth and check the lid is secure, ensure the container has a workplace label.

To clean and disinfect with Toraysee™ cloth

- Remove lid from container
- Squeeze out liquid from Toraysee™ cloth
- Wipe over surfaces in one direction with damp Toraysee™ cloth

These processes can be used for prolonged periods of time but common practice is to rinse Toraysee™ cloth at the end of use for the day and empty and rinse container. Water rinse Toraysee™ after use for the day, squeeze excess liquid from cloth and allow to air dry.

- Toraysee™ Antimicrobial finishing process has proven to discourage microbial growth on fibres even after 60 hospital laundering cycles.
- Dampened with water only Toraysee™ has demonstrated the ability to remove greater amounts of ATP, bacteria and viruses than pre-moistened disinfectant wipes and split microfibre cloths.
- Toraysee™ after soaking in 1% sodium hypochlorite for 5 weeks removed 99.6% of soil as compared to 99.5% before treatment. Demonstrating Toraysee™ maintained excellent removal of organic soils even with prolonged presence of strong concentrations of sodium hypochlorite.

Cost of use - Based on 50 use applications per day. Toraysee™ cloth cost based on sixty days of use. Cost per day = .20

Cost per day	=	.20
Number of cloths used for sixty days	=	1
PCS 5000 use per day 500 mls	=	2.85
Toraysee™ / PCS 5000 cost per day	=	3.05
Cost per day 5990 · 50 12"x12" wipes per day	=	22.00
NUMBER OF WIPES USED IN SIXTY DAYS	=	3000
Cost per day 5987-6 · 7"x12" wipes per day	=	12.27
NUMBER OF WIPES USED IN SIXTY DAYS	=	3000
Bucket saturation of microfiber cloths 3 L	=	8.88
Cost of microfibre cloths 50 required launder cost + Cost of cloths	=	8.34
Number of cloths used sixty days	=	50
Split microfibre charged bucket system cost per day	=	17.22

[Click here for a copy of validation study of one cloth per day process. PCS contracted CREMCO to perform six separate Quantitative Carrier Test #3 studies to validate Toraysee™ – PCS 5000 Oxidizing Disinfectant Cleaning Process in simulated real-world test to validate the process can.](#)

- (1) Remove large numbers of hospital pathogens.
- (2) Prevent the transfer of pathogens to previously uncontaminated surfaces.
- (3) Demonstrate that repeated use of the process that a single Toraysee™ cloth could be repeatedly used for extended periods of time.
- (4) Provide repeated test demonstrating PCS 5000 Oxidizing Disinfectant Cleaner with Health Canada approved label claim to kill C. difficile spore form can remove organic and inorganic soils from Toraysee™ without the need for any additional decontamination processes.

Assessment of the Durability and Activity of PCS Toraysee™ Cleaning Cloths for Decontaminating Hard, Non-Porous Environmental Surfaces: Testing with Coronavirus 229E (ATCC VR-740), Murine Norovirus (Strain S99), and Clostridioides difficile spores(ATCC 43598) as representative Healthcare-Associated Pathogens

The objective of this study was to:

- a. Conduct laboratory-based testing on PCS Toraysee™ Cleaning Cloths for the microbial decontamination of hard, non-porous environmental surfaces representing those found in healthcare settings. The aim here was to evaluate the durability and efficacy of a cleaning/sanitizing process using PCS Toraysee™ Cleaning Cloths.
- b. Test a single PCS Toraysee™ Cleaning Cloth in multiple studies to evaluate the efficacy of the cloth when it is used over and over and is decontaminated using PCS 5000 after each use.

TEST RESULTS

Table 1,2,and 3 summarize the result of efficacy tests on 229E, MNV and C. difficile spores, respectively.

Table 1: 229E virus inactivating/removing activity using PCS Toraysee™ cloth.

	PFU/cm2			Percent		Average Percent	
	Control	Contamination	Transfer	Reduction	Transfer	Reduction	Transfer
Test 1	3,458	0	0	100*	0*	100	0
Test 2	8,292	0	0	100*	0*		

*=No PFU were detected in the eluents tested.

Table 2: MNV virus inactivating/removing activity using PCS Toraysee™ cloth.

	PFU/cm2			Percent		Average Percent	
	Control	Contamination	Transfer	Reduction	Transfer	Reduction	Transfer
Test 1	71,111	0	0	100*	0*	100	0
Test 2	142,500	0	0	100*	0*		

*=No PFU were detected in the eluents tested.

Table 3: C. difficile spores inactivating/removing activity using PCS Toraysee™ cloth.

	CFU/cm2			Percent		Average Percent	
	Control	Contamination	Transfer	Reduction	Transfer	Reduction	Transfer
Test 1	4.76 x10⁶	0	0	100*	0*	100	0
Test 2	2.87 x10⁶	0	0	100*	0*		

*=No CFU were detected in the eluents tested.

Conclusions

The results of this study showed that, under the test conditions specified, PCS Toraysee™ cloth with PCS 5000 efficiently decontaminated the contaminated platform and also prevented the transfer of infectious virus and C. difficile spores to the clean platform. The PCS Toraysee™ cloth’s integrity and efficacy also was not affected in 6 separate efficacy tests on the three microorganisms in two months.

The stability test also shows the potency of PCS 5000 did not dropped below the acceptable range (<5000 ppm) when the PCS Toraysee™ cloth was kept in PCS 5000 in a closed container for 10 days.