PCS

PROCESS CLEANING SOLUTIONS®

Bringing Science to the Art of Cleaning

Why your health care facility or corporation should consider PCS a Canadian based manufacturing corporation.

- CANADIAN manufacturer of Health Canada DIN registered Bleach disinfectants with a variety of concentrations suitable and in use in a number of health care facilities in Canada. PCS products are manufactured in Peterborough by Ontario taxpayers supporting Ontario's health care system. Health care in Canada is a very small community and PCS is your local manufacturer of Health Canada approved sodium hypochlorite disinfectants.

- At PCS we have both ready to use liquids and pre moistened wiper **kits** with multiple concentrations of bleach registered with Health Canada. In health care both ready to use liquid and wiper **kit** formats are appropriate for use.

- At PCS we have many options that individual facilities can choose from. PCS has various options for cleaning .

  MicroClean all natural cleaning, ECOgent General Purpose Cleaner with targeted use of disinfectants .

- **Neutral pH hypochlorous water cleaners and disinfectants that contain an equilibrium of 50 % sodium hypochlorite and 50 % hypochlorous acid.Neutral pH PCS 250 Oxidizing Disinfectant Cleaner. Use to clean frquently touched surfaces when staff,visitors or patients are present. Apply to surface and wipe dry.There are no hazards asscociated with this product in normal use.**

Replacing imported bleach products with locally manufactured products supports a sustainable Canadian economy.

PCS 5000 Oxidizing Disinfectant /Disinfectant Cleaner or wipes.
Health Canada approved label Kills *C. difficile* spore form in 5 minutes.

Process Cleaning Solutions Canada's manufacturer of Health Canada registered sodium hypochlorite disinfectants is pleased to announce the following Health Canada approved label changes.

PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner

- Kills Bacteria (Bactericide)
- Kills Pseudomonas aeruginosa, Salmonella enterica, and Staphylococcus aureus
- Kills *Clostridium difficile* (*C. difficile*) (sporeform)
- To disinfect apply to pre cleaned surfaces and keep wet for 5 minutes.
- Guarantee 0.5 % Sodium Hypochlorite when packed.

DIN: 02360500

PCS 5000 Oxidizing Disinfectant/ Disinfectant Cleaner Wipe kits

- Kills Bacteria (Bactericide)
- Kills Pseudomonas aeruginosa, Salmonella enterica, and Staphylococcus aureus
- Kills *Clostridium difficile (C. difficile)* (spore form)
- To disinfect apply to pre cleaned surfaces and keep wet for 5 minutes.
- Guarantee 0.5% Sodium Hypochlorite when packed.

DIN: 02360519

RESULTS

For Control and Neutralization Results, see Tables 1-5.
All data measurements including the culture purity, carrier sterility, neutralizer sterility, carrier population, neutralization confirmation and HCl resistance controls were within acceptance criteria.

For Test Results, see Tables 6-8.

ANALYSIS

PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner {Lot 102108 (≥60 days old), Lot 122056 and Lot 122057}, ready to use, demonstrated a >99.9999% (>6.81 Log_{10}), a >99.9999% (>6.81 Log_{10}), and a >99.9999% (>6.72 Log_{10}) reduction, respectively, of *Clostridium difficile* - spore form (ATCC 43598) following a 5 minute exposure time when tested at room temperature (21°C).

STUDY CONCLUSION

Under the conditions of this investigation, PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner, ready to use, demonstrated efficacy against *Clostridium difficile* - spore form as required by the U.S. EPA and Health Canada Therapeutic Products Directorate following a 5 minute exposure time at room temperature (21°C).

In the opinion of the Study Director, there were no circumstances that may have adversely affected the quality or integrity of the data.

Scope: The purpose of this study is to compare the cleaning performance and speed of cleaning of commercial all purpose cleaners.

Standards: CSPA DCC-17 Greasy Soil Test Method for Evaluating Spray-and-Wipe Cleaners Used On Hard, Non-Glossy Surfaces

Products Tested:

Products	UPC#	Lot#
PCS1000 Oxidizing Disinfectant CleanerLC#14-T0098	5107300006	14085
PCS5000 Oxidizing Disinfectant CleanerLC#14-T0099	5107300556	63027

Equipment Used:
Gardner Blue Straight-line Washability Machine
Hunter Labs Mini-Scan Colorimeter
Paint roller
Cheesecloth wipes
Cellulose Sponges
Latex Paint – flat
Binder clip
Caron 6010 Environmental Test Chamber

Materials:
Soil Components:
Vegetable Shortening
Lard
Vegetable oil
Carbon Black

Procedure:
Panel Preparation
Double-coat masonite tiles with latex paint using a paint roller, and allow to set overnight. Cure tiles at 50°C and 50% humidity for 24 hours.

Evaluation

% Cleaning Efficiency = $(R^c - R^s)/(R^o - R^s) \times 100$

Where R^c = cleaned reflectance
R^o = original reflectance
R^s = soiled reflectance

Results:

Sample	Avg. %C.E.
PCS1000 Oxidizing Disinfectant Cleaner LC#14-T0098	85.8
PCS5000 Oxidizing Disinfectant Cleaner LC#14-T0099	81.8

Pre cleaning provides the safest way to insure disinfectants are effective. Some companies claim one step just because their product is effective in the presence of organic soils.

CLEANING

PCS 5000 Oxidizing Disinfectant / Disinfectant Cleaner. Cleaning efficiency 81.8 % Cleaning performance testing using CSPA DDC-17 Acceptable cleaning performance for general purpose cleaners requires minimum scores of 75%.

SUMMARY OF RESULTS

Test Substance: PCS MR-2013 (Batch # 113020, 113021 and 113022)

Dilution: Ready to use

Test Organism: *Clostridium difficile* - spore form (ATCC 43598)

Exposure Time: 5 minutes

Exposure Temperature: Room temperature (20.7°C)

Organic Soil Load: 0.25% Bovine Serum Albumin, 0.08% Bovine Mucin and 0.35% Yeast Extract (final concentration)

Efficacy Result: PCS MR-2013 demonstrated efficacy of three batches against *Clostridium difficile* - spore form, and therefore, meets the performance requirements set forth by the U.S. EPA following a 5 minute exposure time at room temperature (20.7°C).

STUDY MATERIALS

Test System/Growth Media

Test Organism	ATCC #	Growth Medium	Incubation Parameters
Clostridium difficile - spore form	43598	CDC Anaerobic Blood Agar	35-37°C, anaerobic

PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner

- Active ingredient sodium hypochlorite 0.5%
- Available in Canada only DIN: 02360500
- Hospital grade disinfectants with a 5-minute contact time to disinfect
- Kills Bacteria (Bactericide)
- Kills Pseudomonas aeruginosa, Salmonella enterica, and Staphylococcus aureus
- * Kills Clostridium difficile (C. difficile) (spore form)
- PCS 5000 solution containing a blend of natural ingredients
- Purified water, sodium chloride, carbonates, sodium hypochlorite and sodium hydroxide as pH adjuster
- Buffered stable formulations with a three-year shelf life
- * pH 12
- Scent characteristic of ingredients - bleach scent
- Colour/Form - Colourless, Liquid
- Sodium hypochlorite normally deteriorates rapidly with shelf life from date of manufacture of 11 months for some sodium hypochlorite product
- Using 5987-6 or 5990 wiper kits insures wipes have the sodium hypochlorite concentration on the label when put into service
- PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner equal to 1 and 10 bleach solution recommended by public health officials more than any other disinfectant when outbreaks occur or new pathogens emerge. For example, Centers for Disease Control in Atlanta Guidance for disinfecting for Candida Auris fungus
- "Interim guidance remains in place to permit use of an EPA-registered hospital-grade disinfectant effective against Clostridioides difficile spores. It is important to follow all manufacturers' directions for use of surface disinfectants and applying the product for the correct contact time. Some products with C. albicans or fungicidal claims may not be effective against C. auris, and accumulating data indicate that products solely dependent on quaternary ammonia compounds (QACs) are NOT effective."

Code	Description
5955-6	6 x 946 ml containers with flip top
5955-4	4 x 3.78 liter containers
5987-6	Kit contains 6 canisters with 70 wipes and 6 x 750 mls containers of PCS 5000
5990	Kit containing Pail with 110 12" x 12" (30 cm x 30 cm) wipes and one container of 2.5 liters of PCS 5000

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