



# PCS

**PROCESS CLEANING SOLUTIONS®**  
*Bringing Science to the Art of Cleaning*

PCS Process Cleaning Solutions is devoted to cleaning in such a way as to:

- **Protect public health**
- **Protect the environment**
- **Protect the most sensitive among us**
- **Prevent the spread of antibiotic resistant bacteria.**



# 1. Clean with ECOgent Stablized Bleach Cleaner



Combines the benefit of microfibre cloth cleaning with the public health benefits of bleach.

Oxidizes organic soils and provides a source of free available chlorine in cleaning solutions. Chlorine in the cleaning solutions helps to prevent spreading germs from cleaning.

## Directions

Dilute 1 part cleaner to 64 parts water. (two ounces per gallon).

Use chlorine test strips to test efficacy of cleaning solutions. When strips after dipping into solutions no longer change color, change solution or add additional cleaner.

Diluted solutions are safe to use on most non porous surfaces and can be used to take spots out of some commercial synthetic carpets. If in doubt pre test before use.

## Product Codes:

### ECOgent Stablized Microfibre Bleach Cleaner

5995-6 - 6 x 946mL container

5995-4 - 4 x 3.78 L open stock

## Chlorine Test Strips

5925-12 -12 pack 0 to 200 ppm

## Microfibre Cloths packaged in bundles of 25 x 12/case

PCSMF-BL - Blue

PCSMF-R - Red

PCSMF-G - Green

PCSMF-Y - Yellow

\* Formulation has demonstrated greater than three years stability when stored under normal warehouse conditions [59°-77°F]





## 2. Launder your cleaning cloths and mops with ECOgent Microfibre General Purpose and Laundry Cleaner.

Rapidly releases attached soils from microfibre cloths and provides outstanding cleaning results as a general purpose cleaner.

### Directions

#### General Purpose Cleaning

Dilute 8 mls per liter of water. Use to clean floors, walls, counters, bathroom fixtures and anything that needs routine cleaning. No rinsing required. Laundering of microfibre and other cleaning cloths and mops.

#### Manual cleaning.

Rinse cloths or mops with warm water and wring out. Make up fresh solution

of ECOgent. Soak cloths or mops for a few minutes and wring out a few times. Rinse cloths and mops in fresh warm water. Wring out cloths and mops and allow to air dry. Caution do not leave damp mops and cloths bunched up or sitting in bucket of solutions for extended periods of time.

#### Household and small commercial washers

Set washing program for heavy soil loads, with hot water cycles an extra rinse. Add 120 mls to front loading machines and 240 mls for top loading machines.



#### Product Codes:

5983-4 4x2L with 6 microfibre cloths  
5984-2 2x3.78L closed loop  
5984-4 4x3.78L open stock

## 3. PCS Disinfecting Processes

Stabilized ready to use bleach at safe concentrations and reliable non woven disposable microfibre cloths.

PCS ready to use bleach products have demonstrated a minimum of thirty six months stability when stored under normal warehousing conditions (59°F to 79°F)

Maximize the shelf life of your wet wipes by adding liquid to dry wipes when you are ready to use the product.

### Directions:

Remove lid. Slowly pour entire contents of PCS Oxidizing Disinfectant container over wiper roll in bucket. Thread first wipe in centre of roll through slits in the cover. Do not push finger through opening. Replace lid. Always snap lid closed between uses to prevent moisture loss.

#### Product Codes:

##### PCS 250 Wiper Kits - DIN: 02314843

Contains 0.025% or 250 parts per million of sodium hypochlorite.

Code #5985-6

1 x 750mL container of PCS 250 Oxidizing Disinfectant/Disinfectant Cleaner and 1 x 70 wipes with dispensing container

Code #5988

1 x 2.5L container of PCS 250 Oxidizing Disinfectant/Disinfectant Cleaner and 1 x 110 wipes with dispensing container

##### PCS 1000 Wiper Kits - DIN: 02314851

Contains 0.1% or 1000 parts per million of sodium hypochlorite.

Code #5986-6

1x750mL container of PCS 1000 Oxidizing/Disinfectant Cleaner and 1 x 70 wipes with dispensing container

Code #5989

1 x 2.5L container of PCS 1000 Oxidizing Disinfectant/Disinfectant Cleaner and 1 x 110 wipes with dispensing container

##### PCS 5000 Wiper Kits\* - DIN: 02360500

Contains 0.5% or 5000 parts per million of sodium hypochlorite.

Code #5987-6

1 x 750mL container of PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner and 1 x 70 wipes with dispensing container

Code #5990

1 x 2.5L container of PCS 5000 Oxidizing Disinfectant/Disinfectant Cleaner and 1 x 110 wipes with dispensing container



\*An application has been submitted to Health Canada to revise label

# Evidence based cleaning practices

**Caution biodegradable detergent residues feed bacteria providing nutrition needed for growth on surfaces cleaned.**

**One bacterium can become six million in eight hours. Rinse with clear water after use of biodegradable detergent or disinfectant detergent.**

## CDC Centers for Disease Control and Prevention

How To Clean and Disinfect Schools To Help Slow the Spread of Flu

[http://www.processcleaningsolutions.com/pdf/CDC\\_Cleaning\\_for\\_Seasonal\\_Influenza.pdf](http://www.processcleaningsolutions.com/pdf/CDC_Cleaning_for_Seasonal_Influenza.pdf)

"Clean and disinfect correctly"

"Always follow label directions on cleaning products and disinfectants. Wash surfaces with a general household cleaner to remove germs. Rinse with water, and follow with an EPA-registered disinfectant to kill germs."

## Cleaning Objects/Surfaces to Prevent Spreading H1N1

[http://www.processcleaningsolutions.com/pdf/Cleaning\\_Surfaces\\_to\\_Prevent\\_Spreading\\_H1N1.pdf](http://www.processcleaningsolutions.com/pdf/Cleaning_Surfaces_to_Prevent_Spreading_H1N1.pdf)

"1. Clean all items with soap or detergent and water. 2. Rinse items with clean, clear water."

## How to prevent germs from spreading British NHS National Health Service

[http://www.processcleaningsolutions.com/pdf/How\\_to\\_prevent\\_germs\\_from\\_spreading.pdf](http://www.processcleaningsolutions.com/pdf/How_to_prevent_germs_from_spreading.pdf)

"Germs can multiply easily. Within eight hours, one bacterium on a damp cloth can multiply to six million."

"Germs stick to cloths and are difficult to remove by rinsing, so all cleaning materials should be disinfected and then dried after use."

"Use two buckets for mopping – one for detergent and the other for rinsing."

"Mops and buckets should be cleaned, disinfected and dried after each use."

## American Journal of Infection Control - American Journal of Infection Control xxx (2013) 1-4

Microbial contamination of hospital reusable cleaning towels

[http://www.processcleaningsolutions.com/pdf/Microbial\\_contamination\\_of\\_hospital\\_reusable\\_cleaning\\_towels.pdf](http://www.processcleaningsolutions.com/pdf/Microbial_contamination_of_hospital_reusable_cleaning_towels.pdf)

"Our results indicate that cloth towels used for cleaning hospital rooms contained high numbers of microbial contaminants."

"In the 10 hospitals participating in this study, almost all (93%) sampled cleaning towels contained viable microorganisms even after laundering."

"Conclusions: In this case, hospital laundering practices appear insufficient to remove microbial contaminants and may even add contaminants to the towels. Furthermore, it has been previously reported that towels can interfere with the action of common hospital disinfectants. Either independently or in combination, these 2 factors may increase the risk for transmission of pathogens in hospitals."

## Environmentally friendly pollutants – what your detergent does to waterways.

[http://www.processcleaningsolutions.com/pdf/What\\_your\\_detergent\\_does\\_to\\_waterways.pdf](http://www.processcleaningsolutions.com/pdf/What_your_detergent_does_to_waterways.pdf)

While bacteria are small, what they lack in size they make up for in their numbers and how fast they grow. I often find millions in one milliliter of creek and river water, with bacterial populations doubling every 20 minutes.

"Biodegradable" soaps and detergents are designed as food for bacteria. They are often referred to as "environmentally friendly". Yet if they end up in our waterways they are anything but friendly. These soaps and detergents are meant to feed the bacteria in sewerage treatment plants under controlled conditions. Environmentally friendly detergents are not meant to feed the bacteria in our waterways. They are pollutants when they encourage bacterial growth and loss of oxygen in our rivers and streams. They can be the cause of a very unhealthy ecosystem.

Peter Pollard - Principal Research Fellow, Australian Rivers Institute at Griffith University

## Detergent Residues on Surfaces - Food for Microbes

[http://www.processcleaningsolutions.com/pdf/Detergent\\_Residues\\_on\\_Surfaces.pdf](http://www.processcleaningsolutions.com/pdf/Detergent_Residues_on_Surfaces.pdf)

As many authors have previously emphasized, cleaning and sanitization (or disinfection) of surfaces are separate processes that need to be carried out in separate steps. But within the cleaning process there also needs to be a separation between the application of cleaning solutions containing detergents and the removal by rinsing of any detergent residue after the use of the cleaning solutions.

Immediately after use in surface cleaning, and independent of whatever method is used to apply them, detergent molecules remain chemically unchanged. However, a small but finite amount of detergent remains on the surface. Detergents are then either rinsed off the surface being cleaned or—in all too many cases—remain as residue on the surface in the absence of good rinsing.

The detergents used in commercial cleaning solutions used in the US are strongly encouraged by the EPA to be "biodegradable" and in Europe are required by law to be such. While many in the cleaning industry are aware of the advantages of biodegradability for cleaning products, they may not make the connection between biodegradability and its implication: that cleaning products can form food sources for common environmental microbes. The nutritional use by bacteria of organic molecules like detergents that are adsorbed on surfaces has been studied for almost 70 years (Zobell 1943). A major conclusion from this body of work is that, while the exact mechanisms of the biodegradation processes may differ from those in solution, adsorbed detergent and other organic molecules on surfaces can be used for bacterial growth.

By Dr. Jay Glasel - CATEGORIES: SCHOOLS, HEALTHCARE, FOOD SERVICE, COMMERCIAL BUILDINGS, CLEANING MEASUREMENT, IEQ MEASUREMENT, HEALTH & HYGIENE, GREEN TAGGED: DETERGENT RESIDUES, DISINFECTING, SANITIZING SURFACES