

ENVIRODESIC™ TECHNOLOGY: SUSTAINABLE BUILDINGS, PRODUCTS & SERVICES THAT MAKE MORE SENSE™

PCS NPH Products and Microfibre Wiping Process

CERTIFICATION SUMMARY

Rev13Sep17-1050

CERTIFICATION STATEMENT

PCS Stabilized Neutral-pH Sodium Hypochlorite/Hypochlorous Acid (NPH) products, as formulated by Michael Rochon of Cogent Environmental Solutions, Mulmur, Ontario, and as manufactured by Process Cleaning Solutions Ltd. (PCS), along with the QCT-3 validated PCS Microfibre Wiping Process, are together certified under the *Envirodesic™* Certification Program as suitable cleaners and a suitable cleaning process where maximum pathogen removal is required, and where Maximum Indoor Air Quality™ and minimization of health risks is preferred. This certification covers PCS Spray and Wipe Hand and Surface Cleaner, PCS 250 Oxidizing Disinfectant/Disinfectant Cleaner (New Neutral pH Formulation), NPH 160 Neutral pH Oxidizing Spray Cleaner Disinfectant and No Rinse Sanitizer, PCS 7000 Oxidizing Disinfectant (diluted to neutral pH with water treated with PCS Neutralizing solution), PCS Microfibre Cloths and similar PCS NPH products yet to be formulated. The certification also covers other forms of packaging of the various PCS NPH formulas, as manufactured by PCS, whether for private label or for specialty applications, provided that the formulation of the concentrates involved are identical to that of PCS NPH Products herein certified.

SCIENTIFIC BASIS FOR CERTIFICATION

Envirodesic TM Certification for PCS NPH Products, as applied using the PCS Microfibre Wiping Process, is based primarily on evidence provided to Envirodesic TM by Cogent, in which these products and their associated environmental surface decontamination process have been validated using a newly developed third tier of the Quantitative Carrier Test Method (QCT-3) created by CREM Co Labs to assess decontamination of high-touch environmental surfaces (HITES) by field-relevant wiping. There are three primary properties of the PCS NPH Products and Microfibre Wiping Process that merit their inclusion under Envirodesic TM Certification:

- 1. Through the use of their microfibre wiping procedure and through application of neutral-pH hypochlorous acid, they significantly reduce organic surface contamination. For example, testing completed in September 2017 by CREM Co. Labs using the QCT-3 procedure shows that in a mixed vegetative bacteria (*Staph. aureus* and *S. choleraesuis*) and *C. difficile* spore environment, Neutral pH PCS 250 Oxidizing Disinfectant Cleaner resulted in 100% reduction in vegetative bacteria with zero transfer to clean surfaces and reduction of *C. difficile* spores to less than 1 cfu/cm² after wiping, with less than 1 cfu/cm² transferred to clean surfaces. Their effectiveness in reducing surface contamination can also be verified in situ by cleaning staff, with the use of ATP monitors.
- 2. They drastically reduce the amount of chemical intervention, along with its associated environmental, occupational and occupant health risk from toxicity (e.g. from concentrated hypochlorite or quaternary ammonia compounds) that is required to clean environmental surfaces, as well as reduce potential damage to equipment and surfaces. By doing so they represent a significant step towards reducing and eliminating the problematic use of disinfectants and disinfectant cleaners.
- 3. Cogent Environmental and PCS are notably advanced in terms of full public disclosure of ingredients and their use of mostly naturally occurring inorganic ingredients (deionized water, acetic acid, NaOH, soda ash dense food grade, sodium chloride, sodium hypochlorite and sodium bicarbonate USP#1 powder). The products could theoretically be produced for hundreds of years without causing significant resource depletion, As such, the products are a significant advancement towards sustainable cleaning.

ADDITIONAL SUBJECTIVE INFORMATION REGARDING ENVIRONMENTAL HYPERSENSITIVITY

Because these products and methods do not rely on leaving residues but rather on efficient removal of biofilms, it is our opinion that they are generally suitable for use in installations occupied by and/or designed for environmentally hypersensitive persons. However, some of the products do have a mild bleach odour and it has not yet been determined whether the products are suitable for direct use by environmentally hypersensitive persons. Hypersensitive individuals are cautioned to test cleaners for compatibility with their own sensitivities.

SUITABILITY FOR USE IN PUBLIC BUILDINGS INCLUDING HEALTH CARE AND EDUCATIONAL INSTITUTIONS

PCS NPH Products, as applied with the PCS Microfibre Wiping Process, are highly suitable for use in public buildings, including hospitals, nursing homes, schools, government buildings, etc. The easiest way to lower surface contamination is by mechanical soil removal, and the easiest way to lower indoor air pollution immediately is to convert to low-emission cleaning products. PCS NPH and the Microfibre Wiping Process together provide a competent first cleaning step of removal of organic debris that will minimize the need for any further disinfecting of surfaces.

Bruce M. Small, Director Envirodesic TM Certification Program

Envirodesic **M** Certification is an ongoing process whereby additional data and consumer experience is added to a product file as it becomes available. Persons wishing to ask questions about the certification criteria or the suitability of the product for different populations are invited to contact the Envirodesic **M** Certification Program at our office below.