

HOCL Sanitizing Makes Quick Work of COVID-19

About Hypochlorous Acid - HOCl

- HOCl is the scientific formula for hypochlorous acid, a weak acid similar to that of a mild citrus juice.
- HOCl is made naturally by white blood cells in all mammals for healing and protection.
- HOCl is a powerful oxidant that is effective against invading bacteria, fungi, and viruses.
- Generating HOCl by running electricity through a solution of saltwater was discovered in 1970s.
- HOCl is now used in healthcare, food safety, water treatment, and general sanitation.

Why is HOCl more efficient at killing pathogens?

->Hypochlorous Acid (HOCl) vs. Sodium Hypochlorite (Chlorine Bleach)

- The Hypochlorite ion carries a negative electrical charge, while hypochlorous acid carries no electrical charge.
- The hypochlorous acid moves quickly, able to oxidize the bacteria in a matter of seconds, while the hypochlorite ion might take up to a half hour to do the same.
- Germ surfaces carry a negative electrical charge which results in a repulsion of the negatively charged hypochlorite ion to the area of the germ surfaces, making hypochlorite ion less effective at killing germs.
- The hypochlorous acid's lack of electrical charge allows it to more efficiently penetrate the protective barriers surrounding germs.

At Proud Smiles, we believe that the COVID-19 health challenge calls for expanded sanitizing protocols. Electrolyzed water - also known as hypochlorous acid (HOCl) - is a highly effective and intrinsically safe sanitizing agent, and it can be generated in unlimited quantities with technology recently installed at Proud Smiles from the Miami-based manufacturer EcoloxTech.

The single most important feature of hypochlorous acid is that it is unusually efficient in eliminating viruses. Research at a FDA-approved lab proved that electrolytically generated hypochlorous acid can kill norovirus in less than one minute at 50 ppm.

National and international reference laboratories have proven that HOCl works very well against viruses, including norovirus and human coronaviruses. One study is of particular interest: in 2016, researchers at the University of Washington School of Public Health found that HOCl was more than 99.999 percent effective in eliminating coronavirus OC43, which is similar to COVID-19.

HOCl that is generated from EcoloxTech systems is FDA-cleared for washing fish and seafood, fruits and vegetables and sanitation of food prep surfaces without rinsing. HOCl is intrinsically safe, as it is non-irritant and the human body produces the same molecule for self-defense. In fact, it is so safe to inhale that it is being evaluated as a treatment for throat and lung infections.