The body uses HOCl to neutralize toxins, kill pathogens, reduce inflammation, and enhance the body's natural healing abilities. Accordingly, a manufactured version promises benefits as a cleaning solution for wide range of industries and uses.

- **Wound Care.** HOCl is not a new revelation when it comes to wound care antiseptics. In fact, usage dates back to the World War I as a way to neutralize chemical burns and disinfect wounds. Due to its effectiveness in targeting bacteria without further harming surrounding healthy tissue, HOCl makes for an ideal wound care agent.
- **Ophthalmology.** Since the eyes are very sensitive, they need gentle, yet effective antibacterial care. HOCl delivers on both fronts: it is not harsh or toxic, yet remains effective in fighting infections and promoting the body's healing responses. Despite curtailing harmful bacteria, it does not affect the biodiversity of beneficial microbes.
- **Medical Disinfection.** HOCl is registered as one of the most effective hospital-grade disinfectants for use in hospitals, clinics, doctors' rooms, and ICUs. Whereas other disinfectants can leave a strong odor that trigger sinus or asthma conditions and cause irritation, HOCl has no such effects.
- **Covid-19.** Hypochlorous acid has proven effective in killing SARS-CoV-2, the cause of Covid-19 infection; therefore, it can serve as an effective protective measure against the virus. Since HOCl is free of alcohol, soap, and fragrance, it makes an ideal sanitizer for those with sensitive skin.
- **Animal Care.** HOCl is not just effective for human systems, but also for use with animals. Use HOCl to treat wounds large and small, soothe inflamed areas, and fight bacterial skin infections. Veterinary clinics also use the chemical for general sanitizing purposes.
- **Dermatology.** Dermatologists use the bacteria-fighting properties of HOCl to assist in acne prevention, wound healing, and inflammation. Unlike products containing a host of chemicals, alcohol, and fragrances that can trigger skin reactions, hypochlorous acid is a gentle and natural defense.

APPLICATION OF HOCL IN DENTISTRY

Performance and safety tests consistently show that HOCl performs better than older technologies such as hydrogen peroxide (H202) and hypochlorite when it comes to dental practice sanitation. Its characteristic biocompatibility means that it doesn't cause any damage to the human reproductive system, is non-mutagenic, and is non-cytotoxic. This stands in contrast to many other disinfectants that don't differentiate between native and foreign microbial cells.

Other disinfectants have a negative charge with pathogens, actively repelling their molecules. Meanwhile, neutral hypochlorous acid molecules rapidly attack bacteria cell walls without resistance. This significantly decreases the time it takes to kill bacteria.

With its safe and fast-acting application, HOCl promises a safe solution for patients and practitioners, while also saving time between patient changeovers. It is now integral in dissolving biofilms in intraoral dental procedures, before, during, and after treatment.

Excerpt from Sterngold® blogpost: https://www.sterngold.com/blog/hocl-medical-professional-disinfectant