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#### Hypochlorous and the Poultry Industry

Infection Control Systems (ICS) focuses exclusively on providing environmentally sustainable hypochlorous (HOCI) as a safe and effective means to sanitize and disinfect. HOCI has emerged as a promising sanitizer due to its efficacy in reducing pathogens like E. coli, Salmonella, and Listeria.

HOCl is 120 times more effective than bleach. This extraordinary biocidal effectiveness is simply based on the amount of Free Available Chlorine (FAC) within the disinfecting solution. While chlorine produces the desired biocidal effects, a sodium hypochlorite (bleach) solution only has 5% available chlorine, whereas HOCl has 95% FAC. For this reason, far more bleach is needed to get the same biocidal effect as hypochlorous. HOCl is also proving to be the preferred disinfectant within the poultry food prep industry over quaternary ammonium compounds (Quats). *"In comparison to Quats, HOCl offers several advantages that make it a preferred choice for maintaining food safety standards. HOCl has an improved safety profile and has proven to be more effective against a broader spectrum of pathogens. In addition, the growing concerns regarding Quat exposure and potential risks associated with their usage have spurred a shift towards safer and more efficient sanitization methods like eco-friendly HOCl, which is compliant with CDC, FDA, and EPA regulations" (Francine Shaw, Poultry Food Safety Specialist).* 

Very simply, hypochlorous is an environmentally friendly, sustainable, and safe alternative to the billion-dollar chemical pesticide war. A little-known fact is that this naturally occurring oxidant is produced within our own white blood cells to fight infections and is a primary internal defense mechanism throughout the entire animal kingdom.

## Agricultural Benefits.

While the COVID pandemic will begin to fade from headlines around the world, the threat and impacts of dangerous pathogens will continue to plague the agricultural industry for decades, and even centuries to come. Biosecurity for crops, livestock, and food prep has never been more critical, and it is expected to grow exponentially as billions of agricultural dollars are expended annually on increasingly toxic and carcinogenic pesticides to combat increasingly resistant pathogens.

### **Poultry Applications**

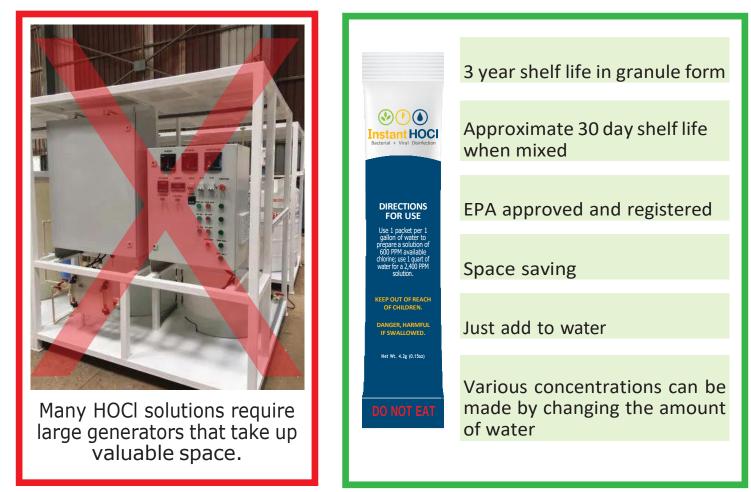
Poultry operators mix ICS's Instant HOCI<sup>™</sup> at concentrations varying from 10 ppm up to 2400 ppm depending upon multiple applications within hatcheries, as well as grow-out and processing facilities. Many commercial hatcheries prepare 55 gallon drums at a time for use in disinfecting setter and hatch rooms, post-hatch tray baths, and egg washing. Broiler farms are finding a 58% reduction in mortality over a 40<sup>+</sup> day grow-out period simply by adding as little as 10 ppm of Instant HOCI to drink lines.



### Just add water

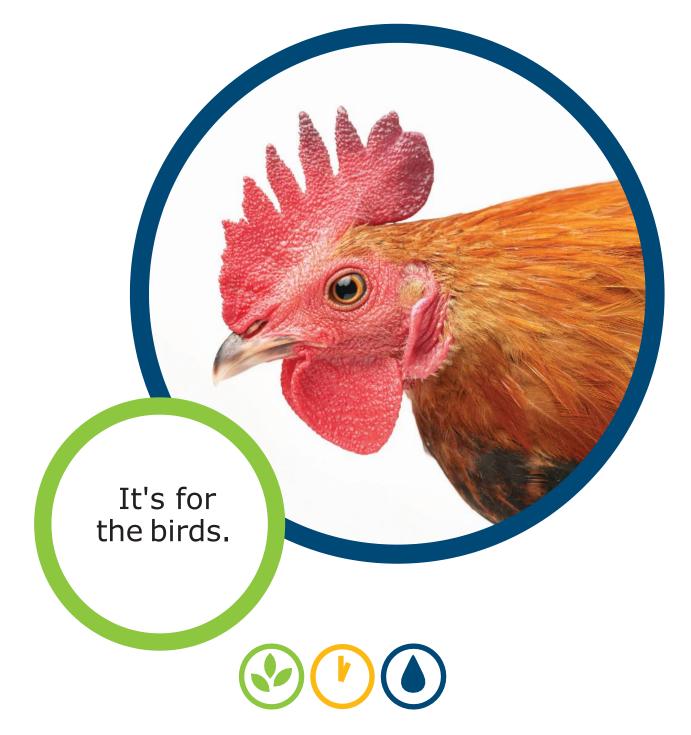
Instead of costly and labor-intensive electrochemical activation of HOCI in generating systems, ICS has found an alternative means to generate hypochlorous quickly and instantly by simply pouring an advanced formulation of EPA approved granules into tap water.

The prepackaged granules can be shipped anywhere in the world for a fraction of the cost of shipping finished hypochlorous liquids in bulk, while also eliminating the need for maintenance intensive on-site generators. The user simply adds pre-measured granules to on-site water to attain the exact HOCl concentrations required for any specific application. Moreover, while liquid HOCl has a limited shelf life of approximately 30 days, the specially formulated granules have a <u>shelf life of 3 years</u>. Finally, it should be noted that ICS's granular product, being branded and marketed as Instant HOCl<sup>™</sup>, is fully EPA approved and registered.





# Instant HOCI $^{\text{\tiny M}}$ For The Poultry Industry





#### Please contact us to further explore the benefits and cost savings of HOCI

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