

Make Your Own Disinfection from Farm to Fork

Learn how to improve product quality, create a safer environment for employees, reuse process water and help the planet.





Join us on the path to zero chemicals



Understanding Chlorine

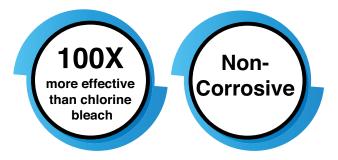
The power to make your own disinfectant.

Bleach (hypochlorite) is misunderstood. Did you know that Bleach loses its disinfection power within 6 months?

FDA lists hypochlorite as the #1 most recognized sanitizer.

HOCI is THE sanitization power of bleach.

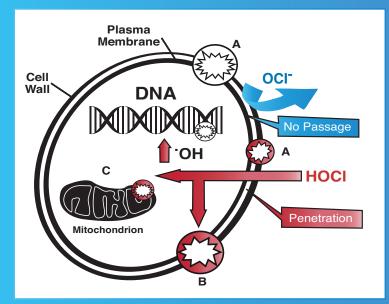
BIOIONIX[®] focuses on the HOCI part of bleach, which is 100x more effective.



Chlorine Species Chart BIOIONIX HOCI = Sanitizer a more perfect solution CI, HOCI 100 % Reactive Chlorine Species CI, 80 (Chlorine Gas) Toxic Gas 60 HOCI 40 (Hypochlorous Acid) 20 Sanitizer OCI-1 2 З 6 8 9 10 0 4 5 7 (Hypochlorite) Cleaner pН The pH profile for reactive chlorine species

BIOIONIX[®] is the ONLY industrial scale producer in the world.

Artificial Immune System



Our proven, approved, and patented technology uses non-chemical, natural SuperOxidants[™] to disrupt and destroy the DNA and RNA of pathogens!



3-Tier Solution

The BIOIONIX[®] three-tier technology acts as an artificial immune system that advances food safety.

Tier 1 PATHOGEN DESTRUCTION

BIOIONIX SuperOxidants[™] safely destroy pathogens that flow through our first-tier patented chambers.

G Tier 2 CONTINUOUS DISINFECTION

Release of an all natural, disinfection with controlled concentrations of hypochlorous acid (HOCI) circulates, providing continuous disinfecting properties that are 100 times stronger than bleach and safer to use and handle than toxic chemicals.



G Tier 3 NANOBUBBLES: SANITIZING WHILE CLEANING

Through the generation of activated water, bubbles with diameters on the nano- and micrometer scales are formed. These bubbles have been found to persist in solution for over 24 hours and possess both cleaning and sanitizing capabilities. Their charged surfaces promote electrostatic interactions with hydrophobic contaminants, such as fats, oils, and grease (FOG), allowing for the removal of these substances from surfaces. As the bubbles burst, they produce jets of extremely high pressure and temperature, effectively cleaning contact surfaces of organic matter, biofilms, and solids. The suspended solids are then lifted out of the solution by the bubbles, enabling easy removal. During their collapse, the bubbles also release hydroxyl radicals, resulting in powerful localized disinfection.

Supports 3 Requirements for water reuse:

- 1. Microbial kill
- 2. Reduced turbidity (electroflocculation)
- 3. Water reuse in same or earlier process



Automation and Validation Reporting

BIOSAIF24/7 Software is the brains of the artificial immune system that keeps everything in balance and operating 24/7, providing data intelligence for food safety validation and sustainability reporting.

BIOION			
Client Partner	Trusted Partn		
Location	City, State		
Date	11/29/2024		
w	eekly Operation		Weekly Savings
Operating Hours		120.0	Reconditioned Water (gal)
Average Temperatur	e (°F)	93.5	Estimated Equivalent Chemical Cost
Average Flow Rate (0	SPM)	59.0	Estimated Energy Cost
Average ORP (mV)		253.2	Energy Consumption (kWh)

8.26

Average pH	8	
Notes		
NO FLAGS		

Friday due to holiday break during non-production

BIOIONIX System maintained production standards throughout working days. System down Thursday-

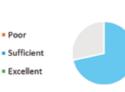
Reconditioned Water (gal)	425,069
Estimated Equivalent Chemical Cost	\$630.00
Estimated Energy Cost	\$0.25
Energy Consumption (kWh)	4.219

Weekly Disinfection

Life Until Service

72%

PATH TO



			Operating	Avg. ORP	Avg. Flow	Avg. Temp		Energy	Recond.
		Date	Hours	Avg. OKP	Rate	Avg. remp	Avg. pH	Consumed	Water
			(hrs)	(mV)	(GPM)	(°F)		(kWh)	(gal)
	Monday	11/25/24	24	757	95	102.51	5.66	1.62	136,493
	Tuesday	11/26/24	24	758	100	101.34	5.92	1.37	144,540
	Wednesday	11/27/24	24	756	100	102.29	5.93	1.23	144,036
	Thursday	11/28/24	24	-384	0	82.48	11.58	0.00	-
I	Friday	11/29/24	24	-621	0	78.66	12.22	0.00	-

