

# OXINE®

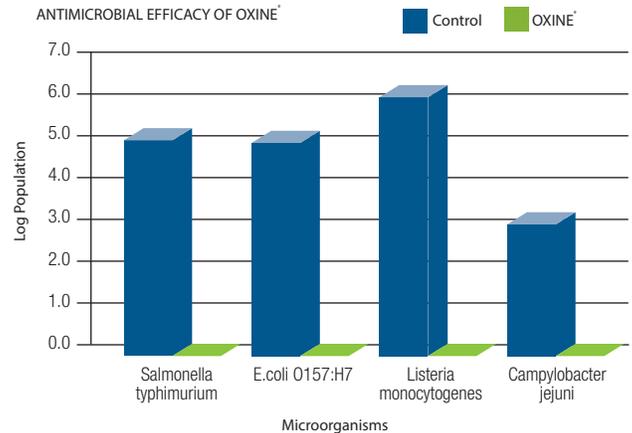
## The Ultimate Antimicrobial Product for the Food Processing Industry



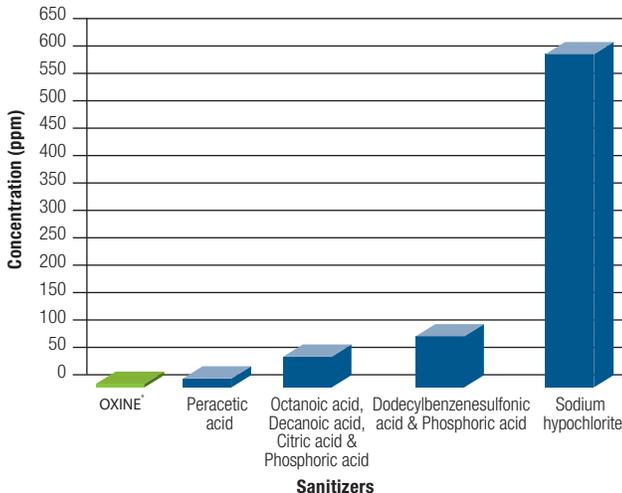
**OXINE® is the most effective, fast-acting, broad-spectrum antimicrobial available.**

OXINE® is a highly refined blend of oxychloro species containing purified sodium chlorite. When activated, chlorine dioxide is produced, greatly enhancing Oxine®'s antimicrobial activity. With applications in the food processing and water treatment industries. OXINE® displays broad spectrum antimicrobial activity, proven effective against *Legionella*, *E. Coli O157:H7*, *Salmonella*, *Aspergillus*, *Listeria*, *Staphylococcus* and *Pseudomonas*, among others. This product is especially suited for the removal and subsequent control of biofilm. OXINE® is EPA registered and is organically approved through Organic Materials Review Institute (OMRI) and possesses a myriad of other approvals.

ANTIMICROBIAL EFFICACY OF OXINE®



CONCENTRATION OF SANITIZERS REQUIRED for >5 log reduction of E.coli O157:H7 in 60 seconds



OXINE® has been shown to be more effective than other common sanitizers, including quaternary ammonia, Iodophors, Peracetic acid, and sodium hypochlorite (chlorine). OXINE® provides a comprehensive antimicrobial intervention program.



Exceptional Chemistry • Extraordinary People  
 www.bio-cide.com • 2650 Venture Drive, Norman, OK 73069  
 405.329.5556 • 405.329.2681 fax • 800.323.1398  
 Bio-Cide International is ISO 9001:2008 certified

## B E N E F I T S

- Ultra high, broad spectrum antimicrobial activity
- Uniquely effective against biofilm
- Effective over a broad pH range (1-10)
- Low corrosion potential at use concentrations
- Resists neutralization due to organic load
- Completely soluble in water
- Does not chlorinate (no THM formation)
- Long lasting bacteriostatic activity
- Excellent deodorant
- No effect on organoleptic properties
- No effect on nutritional quality
- KOSHER certified
- Economical to use
- Can be used with automated delivery systems
- Safe for applicators (PPE required)
- No unusual stipulations on storage
- Organic certified



## A C T I V A T I O N

### Activation

OXINE® requires activation for on-site generation of chlorine dioxide. Activation involves lowering the pH of the concentrate with any GRAS acid. Activation may be accomplished manually in low volume as batch applications; or with BCI's hands-free, cost efficient AANE™ unit, the Wall Mount Activation System™, or the on-line activation system OLAS™, which combines activation with injection into water streams.



AANE™



Wall Mount Activation System™



OLAS™

## A P P L I C A T I O N S

Primary uses in Food Processing Plants, Dairies, Breweries and Beverage Plants are:

- No-rinse sanitation of all food contact surfaces
- CIP sanitizing of processing lines
- Water additive to pasteurizers, bottle warmers and coolers
- Water systems disinfectant for biofilm removal and control
- Bacterial, mold and odor control throughout the facility
- Sanitation of cold rooms, freezers and spirals
- Microbial control in sweet water & recirculating cooling water systems
- Sanitation of filler head assemblies
- Deodorization of rendering areas
- Footbath and door spray bacteriostat
- Sanitation of tank trucks and rail tankers
- Antimicrobial additive for all compatible conveyor and chain lubricants
- Disinfection of condensate pans and drip lines

Fruit and Vegetable Processing

- Flume water for treatment for bacteria, slime and odor control.
- Sanitizing rinse

Stored Potable Water Treatment

## P R O D U C T S P E C I F I C A T I O N S

- Concentration: 2.0 - 2.10% available chlorine dioxide
- Appearance: Colorless liquid
- pH Concentrate: 8.2 - 8.5
- Boiling point: 213° F (100.5°C)
- Melting point: N/A
- Freezing point: 28.9° F (-1.72°C)
- Vapor Pressure: 23.7 mm Hg (25°C)
- Vapor Density: 0.02 kg/m<sup>3</sup>
- Specific Gravity: 1.03 g/ml (20°C)
- Volatiles (by volume): 97% water
- Solubility in water: Complete
- Evaporation rate: Comparable to water
- Very low acute toxicity (EPA Cat III)
- Non-Flammable, Non-Explosive
- Stable Solution
- NFPA Rating: Fire: 0 Health: 1 Reactivity: 1 Special: None