

Oxine®

Disinfecting Solution

A Comprehensive Approach to Infection Control through Premise Disinfection & Water Treatment

Bio-Cide International Inc. has invested many years of research in optimizing sanitation solutions for animal facilities. Oxine® is an outstanding sanitizer specially designed to meet the needs of our customers who desire broad-spectrum biocidal profile. Animal production is an inherently bacteria-rich environment with a processing cycle that is exposed to recontamination. Oxine® is a chlorine dioxide based product which is recognized as the most potent molecule in rapid elimination of pathogens and the biofilms that protect them. Oxine® is proven effective at all phases of production and has been demonstrated to be more effective than other common sanitizers including quats, iodophors and chlorine.



With emergence of highly virulent strains of pathogens, growers are concerned more than ever with getting their stock infected. Reducing the exposure of potential pathogens is an essential element in producing healthy animal stock. A healthy stock results in higher production rates and yields higher feed conversion ratios. Sound breeding management coupled with a good sanitation program, can lessen the chances of disease thereby reducing the reliance on antibiotic treatment.

Oxine® is a highly refined blend of Stabilized Chlorine Dioxide. Oxine® destroys microorganisms by chemically oxidizing their molecular components. Oxine® combined with its activator provides a controlled release of ClO₂. Oxine® is also very effective in the control of malodors by eliminating the odor causing bacteria or compound at the surface.



Applications are fully registered with the EPA, USDA and FDA.



Exceptional Chemistry • Extraordinary People • Excellent Service
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Bio-Cide International is ISO 9001:2008 certified

BENEFITS

- 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



SPECIFIC PATHOGENS

Oxine® is an effective virucide against the following pathogens when used at 500 ppm activated use solution with a ten minute contact time:

- Avian Influenza A Virus (H3N2)
- Canine Parvovirus
- Newcastle Disease Virus (NDV)
- Porcine Reproductive and Respiratory Disease Syndrome Virus (PRRS)
- Pseudorabies Virus

OXINE® VERSUS CHLORINE

Oxine® is Better than Chlorine

- Much greater antimicrobial efficacy
- More organic-load bearing capability
- Does not impart offensive odor or taste to drinking water
- Less corrosive to equipment
- Works in a wider pH range, (hypochlorites typically lose biocidal efficacy above pH 7; whereas Oxine® is effective pH range of 3-10, providing microbial control during pH swings in incoming water)
- Does not create toxic THM's
- Safer for workers and the environment
- 2.6 times more powerful oxidizing capacity than Chlorine
- Requires much lower use solution than hypochlorites
- Removes biofilm more effectively

COMPARISON WITH OTHER DISINFECTING AGENTS

Biocide	Active Ingredient Concentration (ppm)	P. aeruginosa	S. aureus	S. cerevisiae	E. coli 0157:H7
Oxine	Chlorine Dioxide 20,000	5	30	30	3
Chlorine	Sodium Hypochlorite 52,500	200	200	400	600
Hydrogen Peroxide	Hydrogen Peroxide 300,000	36,000	68,000	270,000	

Biocide concentration required for > 10⁵ reduction in viable cell counts in 60 seconds. (milligrams/liters)

APPLICATIONS

Provides superior sanitation in these applications:

- Feed Water Contamination Control
- Processing Plant Disinfection
- Hatchery Sanitation
- Farrowing Houses
- Swine Barns
- Poultry Growout Houses
- Feed Bins
- Calf Barns
- Boarding Kennels
- Walls, Floors, Ceilings and Drains
- Hard Surface Disinfection
- Animal Confinement Areas
- Animal Hospitals

PROPERTIES

Concentration: 2.00 – 2.10% available chlorine dioxide
 pH: 8.2 – 8.5
 Solubility in Water: Complete
 Freezing Point: 28.9° F (-1.72° C)
 Toxicity: Very Low (EPA CAT III)
 Non-Flammable
 Non-Explosive
 Stable Solution

WHY SANITIZE?

- Increase Feed Conversion Ratio
- Reduce Mortality & Disease
- Meet Regulatory Requirement
- Reduce Food Borne Illnesses
- Increase shelf life of Product
- Reduce Liability

DELIVERY EQUIPMENT

Variety of equipment is available for delivery of Oxine®. Contact your distributor for these options and to request literature on Bio-Cide International's range of equipment that will suit your needs.