Disease Control Solutions, LLC

www.dcs-tx.com 713-239-4DCS

lor



DOXYKLOR

Simple. Safe. Aseptic Pathogen Control



Product Description

DoxyKlor[™] is a cutting-edge, hospital grade sanitizer/disinfectant that delivers the power of **active** chlorine dioxide gas (ClO2) in a ready-to-use liquid form. Chlorine dioxide is an antimicrobial that destroys proteins in viruses, bacteria, fungi spores and more. First approved by the EPA in 1967, chlorine dioxide is trusted by the World Health Organization (WHO) as the "safest disinfectant".

Unique Delivery System

Using a major technological breakthrough, a process was developed to consistently and reliably capture and hold active chlorine dioxide gas in a non-reactive and non-flammable colloidal suspension. This patented process delivers chlorine dioxide gas to hard surfaces which quickly destroys pathogens and then harmlessly evaporates after a few minutes, leaving no toxic residue.

Superior Chemistry

DoxyKlor chemistry begins with control. Only true, reagent grade components are accepted. Our focus on quality and safety results in the purest and most effective chlorine dioxide product available.

3 in **1** Sanitizer Disinfectant Deodorizer

Efficacy: Chlorine Dioxide (in aqueous solution) Examples – Summary data from various studies published in peer-reviewed journals

99-100%

Influenza A Virus

		55-10070
	Salmonella	99-100%
	Polio Virus	99%
	Fungi	98%
	Listeria	99%
	Rotavirua WA	99-100%
	L. Buchneri	99-100%
	C. Difficile	99-100%

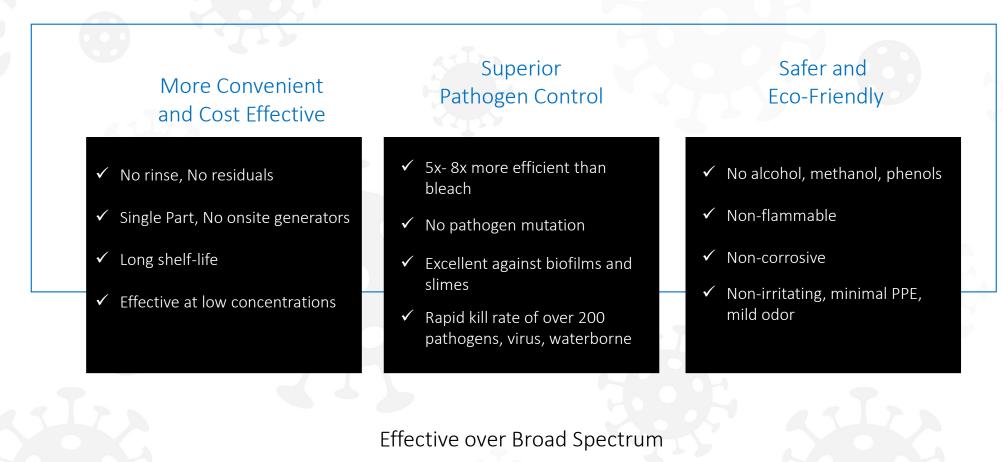
Disease Control Solutions, LLC



DoxyKlor Third-Party Kill Test Results						
Clostridium Sporogenes	15 sec dwell time	98.07% kill				
Escherichi coli	15 sec dwell time	99.99% kill				
Enterococc us faeasium	15 sec dwell time	99.99% kill				
Listeria Monocytog enes	15 sec dwell time	99.99% kill				

DoxyKlor[™] Difference

DoxyKlor[™] is different from all other chlorine dioxide products on the market. It is more effective, more stable and easier to use.



Bactericide | Fungicide | Slimicide | Sporicide | Virucide



Disease Control Solutions, LLC

DoxyKlor[™] Difference

DoxyKlor[™] is Active Chlorine Dioxide

Stabilized Chlorine Dioxide *is not* **Active Chlorine Dioxide**. "Stabilized chlorine dioxide" is in fact Sodium Chlorite (a salt. The "stabilized" term attempts to market Sodium Chlorite formulations as having the same or similar chemical properties to Active Chlorine Dioxide. However, they are quite different.

"Stabilized" Chlorine Dioxide is prepared by buffering sodium chlorite with carbonate or phosphate, and hydrogen peroxide. This approach stabilizes the chlorite not the chlorine dioxide. The stabilized compound is not the same as chlorine dioxide, nor does it have the same oxidizing properties. The oxidizing potential is much lower and the compound is far less useful as a product in general.

DoxyKlor captures Active Chlorine Dioxide (a gas) in an aqueous solution to allow its properties to be utilized on an asneeded basis in a controlled concentration. Chlorine dioxide gas does not react with water and stays as chlorine dioxide within the water. This enables it to kill organisms within the water, as well as any on the surface beneath the water. This trait is *unique to chlorine dioxide* among decontaminating fumigants, as hydrogen peroxide dilutes in water and cannot kill organisms in or beneath the water.

Disease Control Solutions, LLC

DoxyKlor vs. Other Chemicals

	Chlorine Dioxide (Cl0 ₂)	Sodium/Calciu m Hypochlorite (Bleach)	Hydrogen Peroxide (H2O2)	Gluteraldehyde	Peracetic Acid	Quaternary Ammonium Compounds ("Quat")	lodophors
Performance	Very High	Moderate	Moderate	Moderate to High	Moderate	Moderate to High	Moderate
Contact Time	Seconds	Minutes to Hours	Minutes to Hours	30 Minutes to several hours	Minutes	Minutes to Hours	Minutes to Hours
Concentration	.1 ppm – 500 ppm	3,000 ppm – 10,000 ppm	1,000 ppm- 10,000 ppm	500 ppm to 10,000 ppm	30 ppm – 200 ppm	100 ppm – 10,000 ppm	500 ppm – 10,000 ppm
рН	Effective over Neutral to Acidic	Alkaline	Acidic	Neutral	Acidic	Acidic to Neutral	Neutral to Acidic
Corrosiveness	Negligible	Iron and Aluminium		Negligible	Iron	Iron, Copper, and brass	Iron and Stainless Steel
Toxicity	Negligible	Harmful to tissue	Harmful to tissue, skin and eye irritation	Skin irritation	Skin and mucous membrane irritation	Skin irritation	Variable. Iodine is extremely toxic
Biodegradable	High	Moderate to Low	High	Moderate to High	High	Low	Low
Cost	Low to Moderate	Low	Low	Moderate to High	Moderate to High	Moderate to High	Moderate to High



Disease Control Solutions, LLC

Uses and Application Methods

DoxyKlor[™] is extremely versatile. It can be used at full concentration or diluted. Applied by spraying, mopping, wiping, fogging or submersion to sterilize, remove biofilm and eliminate odor.

- Hospitals/Labs
- Manufacturing
- Chemical Processing
- Food & Beverage Processing
- Commercial Facilities
- Nutraceutical & Naturopathic
- Fitness & Wellness
- Public Transportation
- ✓ General Use Hard surfaces
- ✓ Floors/Mopping
- ✓ RO Systems
- ✓ Clean in Place (CIP)
- ✓ Biofilm
- ✓ Tubing/Vents
- ✓ Water Storage
- ✓ Drains



Disease Control Solutions, LLC

Who Can Benefit

DoxyKlorTM is a trusted solution for a vast number of vulnerable situations.

Brewery and Restaurant

> General cleaning and sanitation, disinfecting, bathrooms, floors, walls, ventilation systems, odor control, tasting room, bar

> Food prep areas, non-food contact areas, counters, tables, floors, drains, odor control

> Brewery equipment, new bottle and container sanitations, fill equipment, spray and rinse equipment, CIP processes, fruit and vegetable rinse, non-food contact surfaces, RO systems, tubing, odor control

Facilities Maintenance

> Facilities Maintenance, general cleaning and sanitation, disinfecting, bathrooms, floors, walls, ventilation systems, odor control

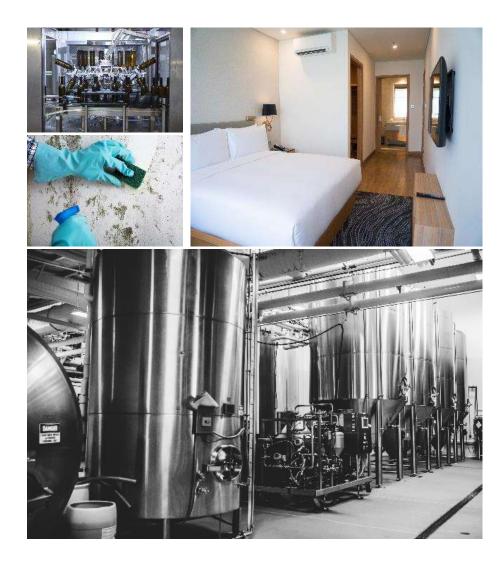
Hospitality and Lodging

> Casinos, hotel common areas, hotel rooms, bathrooms, gyms, spas, pools, clubhouse, garbage receptacles, odor control, housekeeping, cruise ships

Remediation and Restoration

> Mold and mildew eradication, smoke, floods and other natural disasters, odor control

Disease Control Solutions, LLC



Application and Packaging

Product Use Instructions

- Dilute to 300-500ppm effective strength used in hospitals
- Spray onto desired surface with hand held sprayer, pump sprayer or backpack pesticide sprayer.
- Allow to dwell on surface for a minimum of 1 minute.
- Do not rinse. Allow to dry.

*Refer to technical data sheet for specific application and safety instructions.

Storage & Shelf Life

- Unopened 1 year shelf life
- Store in cool, dark area
- Mix for intended use

Packaging Options

- 5-gallon jug 500ppm concentration
 - (32) 5-gallon jugs per pallet
 - (24) pallets per truck load
- 1oz glass spray bottle
 - (81) bottles per case

Applicators readily available at local hardware store.





Disease Control Solutions, LLC



Disease Control Solutions, LLC

