



**AquaSan** is an all-purpose safe and effective disinfectant & deodorizer. It eliminates microbial quickly and easily by harnessing the power of aqueous chlorine dioxide by killing germs, bacteria, viruses, mold and mildew by attacking the microbial through oxidation. **AquaSan** comes in an easy to use, pre-formulated pouch. **AquaSan** eliminates odor at its source and can be used in almost surfaces, such as concrete, tile, glass, vinyl, plastic, fiberglass, wood, painted surfaces, fabrics, and more. If using on fabrics, always do a colorfast test in an inconspicuous area.

Stabilized chlorine dioxide used to be technically difficult to ship and use because of its aqueous form. NOW, with over 12 years of R&D, our rigorously field-tested patented and patent pending(s) products have taken a foothold in the commercial and retail market. **AquaSan** is packed in solid form inside a biodegradable pouch making it very simply, easy and safe to use by just submerging the pouch into a bucket of clean water.

**AquaSan** is an ultimate all-purpose disinfectant & deodorizer for surfaces. It is extremely easy to use, can be sprayed, fogged or mop in bathrooms, kitchens, garage floors, basement floors, vehicle interiors, classrooms, pet areas, and more.

**AquaSan** uses a state-of-the-art technology to generate stabilized chlorine dioxide on-site having the most advanced chemical characteristics in controlling microbial growth. This gives it the highest anti-microbial activity than any other disinfectant available on the market. **AquaSan** is totally safe to be applied in indoor environment, health care, pet centre, public transports, show flats and any living or working spaces. It's proven effective against a broad spectrum of microbial and is especially suited for the removal and subsequent control of biofilm. It works immediately on contact, and remains working until dried. No residual active compound is left behind so no rinsing is required.



## FEATURES

- \* Safe-easy to use
- \* No capital requirement is required
- \* Onsite generation of stabilized chlorine dioxide
- \* Does not react with ammonia
- \* Mildew & microbial control
- \* No harmful chemical residue
- \* Oxidize volatile organic chemicals
- \* No rinsing required
- \* Simple activation procedures
- \* More soluble in water
- \* Destroys phenols and has no distinct smell
- \* Requires shorter contact time to be effective than chlorine
- \* Can be stored up to 2 – 4 weeks

Simple to use

Easy to use

Safe to use



AquaSan penetrates the cell wall of the microorganism and disrupts metabolic functions. This is more efficient than other oxidizers that “burn” whatever they come in contact with. This allows of lower effective concentrations to be used.

AquaSan unlike other disinfectants, is a stabilized liquid that penetrates biofilm by molecular diffusion. Other oxidizers react mostly on the surface of the biofilm to form an oxidized layer, like charring on wood. AquaSan precludes further penetration.



## INTERNATIONALLY RECOGNIZED AND APPROVED ACTIVE INGREDIENT

### SUMMARY

To our knowledge The Johns Hopkins Hospital was the first medical facility in the United States to receive a consecutive public water system permit for the application of a point of entry chlorine dioxide treatment system.

The efficacy of Chlorine dioxide is influence by proper system application, operation, control and monitoring of *Legionella*, pathogenic bacteria and disinfectant residuals. Additionally, identifying and correcting piping deficiencies and understanding water usage is necessary. It is essential that daily flushing protocols and prompt remediation after disruptions to the potable water system be implemented.

Our data confirms that Chlorine dioxide is safe and effective in controlling and eliminating *Legionella*, other pathogenic bacteria and bio-film. Further studies are encouraged.

*Clipping from Legionella control  
in hospital testing, USA*

*USA Postal Services uses Chlorine  
Dioxide for Anthrax decontamination*

**UNITED STATES POSTAL SERVICE**

### Chlorine Dioxide

Trenton, NJ Processing and Distribution Center

This fact sheet is one in a series of fact sheets providing information on the anthrax decontamination activities at the Trenton, NJ Processing and Distribution Center.

**What is chlorine dioxide (ClO<sub>2</sub>)?**  
Chlorine dioxide is a yellow-green gas with an odor similar to chlorine. It has been recognized as a disinfectant since the early 1900's and has been approved by the United States Environmental Protection Agency for many applications.

**How will chlorine dioxide be used at the Trenton Facility?**  
Chlorine dioxide was selected in November 2001 by the USPS as the fumigation treatment approach and best available technology. The selection was based on test results performed by EPA at the USPS Brentwood P&DC in October and November. Experienced companies will produce chlorine dioxide onsite and systematically and safely fumigate the building. The gas will be generated on site at the time of use for greatest effectiveness. Chlorine Dioxide is not flammable nor explosive at the concentrations being used for the Trenton facility fumigation.

The decontamination process will employ a sophisticated air moving system to support the fumigation system and to optimize movement and distribution of gas throughout the facility. Additionally, many engineering control systems will be applied during the chlorine dioxide fumigation process to provide for the optimal environment for successful and thorough decontamination of the facility. These systems include temperature and humidity control, negative air scrubber system, gas dispersion fans, process control and monitoring systems.

The process control and monitoring systems will utilize a man-machine computer interface system to monitor and view the equipment and fumigation process in real time. Upon completion of the fumigation, a chemical scrubber will be introduced to neutralize the chlorine dioxide within the building.

**What is chlorine dioxide used for?**  
Chlorine dioxide is safely used in large quantities in the United States on a daily basis (4 to 5 million pounds per day). It is commonly used for:

- treating/disinfecting drinking water;
- bleaching pulp used in papermaking;
- disinfecting food products such as flour, spices, shrimp, fruits and vegetables;
- sanitizing food processing equipment;
- odor elimination in industrial scrubbers and fish plants; and
- sterilization in biomedical and pharmaceutical applications and of medical equipment.

## APPLICATIONS



## FIELDS OF APPLICATIONS

- \* Musty Odor
- \* Indoor Hygiene
- \* Nursery, Playground & Kindergarten
- \* Health Care Facilities
- \* Institutions such as Rehabilitation Centre, Old Aged Homes
- \* Public Toilets
- \* Hotels and Hostels
- \* Commercial and Industrial
- \* Disinfection
- \* Cooling Towers
- \* Animal Complex
- \* Aircrafts, ferries and vehicles

**Contact us @**

**Calcite International (Canada) Inc.**

**info@calcitegroup.com**

**1-604-998 4880 Canada**

**852-3428 5441 Hong Kong & China**

