

The  $ClO_2GO_2^{TM}$ 

# Pure 3000 Use and Handling Guide



| Company:          | Date/Time: |
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# **Pure**Line

# PURE 3000 — USE AND HANDLING GUIDE

Generated through our patented, NSF certified HP series generators, Pure 3000 is 3000ppm 99.5% pure ClO2. Ideal for trials or low demand applications where a generator may be more than is needed. This product is Ideal for lab tests, small cooling systems, legionella control, CIP applications as well as a host of other disinfection uses.

As with everything PureLine® manufactures, safety is always a primary concern. Pure 3000 is a stabilize solution that can be transported and utilized anywhere in the U.S.. Chlorine dioxide solution is a dissolved gas. At room temperature the Henry's law constant for  $ClO_2$  is ~23. This means that the headspace above a solution of concentrated  $ClO_2$  will be about 23 times more concentrated than the solution itself (e.g. a 3000ppm solution will have ~69,000ppm of  $ClO_2$  at equilibrium (5ppm in the atmosphere is considered immediately dangerous). Precautions and safety measures should be observed when handling higher concentration solutions.

# **ClO**<sub>2</sub> Advantages

- Highly effective against bacteria, viruses, protozoa, mold, algae, odor etc.
- Destroys biofilm quickly and efficiently.
- Very selective, will not react ammonia or inert organic material allowing for measurable residual.
- EPA, FDA, NSF certified.
- Extremely safe (not acids, no chemical reaction to produce ClO<sub>2</sub>, Closed injection systems, little to no exposure).

## **Safety Instructions**

- When handling Pure3000 ClO2 solution, protective gloves should be worn. There is no acid but ClO2 can absorb through the skin so contact should be avoided/minimized.
- Whenever a container of Pure3000 is opened the individual should wear at a minimum a cartridge respirator to avoid irritation from the any CIO2 gas that escapes the container.
- Goggles should be worn to prevent splashes from entering the eyes.
- Dispensing of Pure3000 should take place in a lab hood or well ventilated area
- If a container of Pure3000 must be left open (for pumping or other operations) a vent or hood should be used to prevent ClO2 gas from accumulating in the nearby surroundings.
- Do not heat ClO<sub>2</sub> solutions above 90oF and never use an open flame to heat the solution.
- Once the CIO<sub>2</sub> has been injected or added to a liquid stream and diluted below 10ppm, PPE is not required.

### **Dosing Instructions**

- Add 1ml of Pure3000 to 3L of water for every ppm of dosage desired (e.g. 3ml in 3L is a 3ppm dosage).
- Inject CIO2 under the surface of the liquid to be treated to prevent gas off.
- Store Pure3000 in a cool dark place to prevent ClO2 degradation.

#### **5 Gallon Containers**

0.125 lbs ClO<sub>2</sub> per container Treats 15,000 gallons of water @ 1ppm dose **30 Gallon Drums** 

0.75 lbs ClO<sub>2</sub> per container Treats 90,000 gallons of water @ 1ppm dose

### **55 Gallon Drums**

1.37 lbs ClO<sub>2</sub> per container Treats 165,000 gallons of water @ 1ppm dose

#### 275 Gallon Tote

6.88 lbs ClO<sub>2</sub> per container Treats 825,000 gallons of water @ 1ppm dose

