

## SOLUTIONS Lubrox Chlorine Dioxide



### WHAT IS IT?

Chlorine Dioxide is a chemical which when dissolved in water becomes a simple, effective method of keeping water systems safe by controlling microbes while maintaining a low environmental impact.

- It is economical and very effective
- It leaves no taste or taint
- Unlike Chlorine it does not produce potentially cancer causing Trihalomethanes
- It neutralises some aromatic compounds
- It prevents the build up of resistance by micro-organisms

### WHAT DOES IT KILL?

- Bacteria, including Legionella, Listeria, MRSA, E. Coli, Salmonella, Giardia, Cryptosporidia, etc
- Viruses
- Algae
- Fungi
- Biofilms

### WHERE CAN YOU USE IT?

- Continuous disinfection of drinking or process water
- Product washing in the food industry
- CIP in the food and beverage industry
- Legionella control in domestic and process water supplies
- Cooling tower biocide
- Vehicle wash disinfection and legionella control
- Tank cleaning
- Water softener disinfection
- Ice machine disinfection
- Hydrotherapy pool disinfection

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### HOW DOES IT WORK?

Chlorine Dioxide is a dissolved gas in water and is different from and should not be confused with chlorine. It reacts in a different way from chlorine and kills bacteria by attacking the cell membrane and RNA in a bacterial cell.

It also reacts with and deactivates viruses.

It breaks up biofilms and kills the microbes in a biofilm.

### WHAT ARE BIOFILMS AND WHY ARE THEY SO IMPORTANT?

Biofilms are the preferred habitat of bacteria in nature. They are an irregular thin layer (1-5 microns thick) on a surface which is made up mainly of water, (up to 95%) and strands of sugar-like material which appear like slime.

Biofilm is a good insulator (5 times better than scale) and can protect bacteria from biocides and other forms of treatment. It also absorbs a lot of kinetic energy, thereby increasing costs to industry due to

- increased heating/cooling costs
- increased pumping costs
- the ability to harbour pathogens (particularly legionella)
- the limited effectiveness of conventional treatments against biofilm, such as chlorine or heat.



### HOW TO USE CHLORINE DIOXIDE

Chlorine Dioxide can be generated on site using our Lubrox Chlorine Dioxide precursors and generators. The system is safe and simple to use and can have sophisticated controls and monitoring built into them.

### OUR SUPPORT

Lubron offer a total support package from survey through design, build and application of the optimum technology to after sales service and support.

At Lubron we live for quality. We offer you comprehensive service and support - including analysis of your water and site inspections - in order to maintain your water treatment at an optimum and ensure compliance with regulations. You will also receive a detailed report and carefully considered advice after each site visit.



The Lubrox Dosing System

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