



Environmental friendly – Safe and easy to use - Economical

Chlorine dioxide, discovered in 1814, was not successful at all in industrial applications and (drinking) water treatment despite superior disinfection capacities. The main reasons of the lack of success were the physical chemical properties of the product. Chlorine dioxide had to be produced on the spot, was an unstable and explosive gas and also generated many by-products (Chlorite, free chlorine,...)

Diamondoxide is the most safe concept for the production of chlorine dioxide and its a concept in which a pure chlorine dioxide solution of 0,45% is generated in water by the reaction of 2 stable liquids. The chlorine dioxide is practically 100% pure (99,9%). There are no by-products such as free chlorine and chlorite. There is no risk of explosion. Due to all these advantages and the superior disinfection capacity, chlorine dioxide is now a very useful disinfection product for many applications like potable water, industrial activities, etc...

Diamondoxide can be perfectly used for water disinfection: drinking water, wastewater, effluent water, sewage water, oil and gas industry, paper and pulp industry, cooling towers, pipeline and tank cleaning, etc.

SUMMARY

Diamondoxide has a kinetic halftime between 30 and 45 days when stored in a dark, dry place at the temperature of +- 20°C. Is practically pure: (99,9%). No explosion risk (use of special chemical inhibitors). Is not corrosive (less than water). Is very easy to handle and transport.

MICROBIOLOGICAL PROPERTIES

Diamondoxide is a broad-spectrum disinfectant & much stronger than chlorine. Kills bacteria like algae, fungi, yeast, viruses, cyst. Also work on broad pH range (4-10). Destruction of and prevention against biofilm. Effective against legionella.

ENVIRONMENT

- ∞ **Diamondoxide** does not contain or generate free chlorine.
- ∞ Does not generate chlorite after preparation in the concentrate.
- ∞ Is not generating by products like Thm's, Haa's and Mutagen X like chlorine is doing.
- ∞ Does neither change the taste nor the colour of treated water.

ECONOMICAL

Is very easy to use and can be dosed in low quantities because of its power and strength.

- ∞ Requires very simple dosing and measuring equipment.
- ∞ Implies a very safe preparation method.
- ∞ Does not require a reactor/generator investment.
- ∞ Does not require high technical staff.

APPLICATIONS

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| ✓ Disinfection of Drinking Water (Potable water) | ✓ Beverage Industry - Breweries |
| ✓ Industrial application: Wastewater, processing waters, ... | ✓ Swimming pools - Whirlpools |
| ✓ Paper and pulp industry: bleaching, wastewaters. | |
| ✓ Cooling towers: against Legionella - Biofilm removal | |
| ✓ Food industry: milk, meat, slaughterhouses, ... | |
| ✓ Food Industry for Washing waters (vegetables) & Surface disinfection | |
| ✓ Agriculture: irrigation, drinking water, wastewaters, farm disinfection (poultry, pigs). | |