

# **TECHNICAL DATA SHEET**

### EOXIDE LQ 75 - (CIO2- 0.75 %)

#### Product name : EOXIDE LQ 75 – (CIO2- 0.75 %)

Biocide product type conform H.G.956/2005: **Group 1**; type of product TP 5 – Disinfectant for potable water **Category of utilization**; water disinfection **Chemical Name**: Molecular formula: CIO2-liquid Active ingredient: chlorine dioxide in a 0,75% concentration .; NR.CAS: 10049-04-4

#### **GENERAL DESCRIPTION:**

**EOXIDE LQ 75** Is a concept in which a pure chlorine dioxide solution of 0,75% 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.

The kinetic halftime at 20°C is between 30 and 45 days, stored in a dark and dry place. 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, including the food and beverage industry.

#### **APPLICATIONS**

Disinfection of potable water.
Industrial application: waste waters, processing waters, ...
Surface disinfection (food industry ).
Paper and pulp industry: bleaching, waste waters.
Cooling towers: against Legionella.
Agriculture: irrigation, drinking water, waste waters, farm disinfection (poultry, pigs ).
Food industry: milk, meat, slaughter houses, ...
Beverage Industry - Breweries.
Washing waters (vegetables, potatoes ).
Swimming pools - Whirlpools.
Legionella - Biofilm removal.



#### **PREPARATION:**

eOxide LQ75 will be supplied in 2 concentrated products, eOxide LQ75 Component A and eOxide LQ75 component B. The product can be prepared on location. By example we make 500 liter eOxide LQ75 CIO2 0.75%

## Simple reparation of EOXIDE (0,75%) 500 liter

1. Fill the tank (HPDE Quality) with 425 L tap water



2. Add then 25Liter of EOXIDE component A to the 425L water.







3. Then 50 Liter of EOXIDE component B to the tank with water and component A

4. Close the tank.





5. Wait for minimum 7 hours.



Wait for 7 hours

- 6. Stir the product one time to make a homogeneous solution. (Never use a metal to stir the product. HDPE/PVC is recommended to stir)
- 7. EOXIDE 0.75% CIO2 is now ready to use.



#### **Technical conditions for quality:**

With iodometry at pH 7,2 and subsequent iodometry at pH 2.

The ratio of equivalents titrated at pH 7,2 and pH 2 shall be 1 to 4 within a deviation of less than 3% and indicate at least 97% of the expected yield. If not appropriate, adjustments and an additional control can be made.

#### Use instructions and contact time :

Liquid chlorine dioxide can be dosed by standard dosing pumps. The dosage and contact time is depending on the total organic load in the water or present contamination on the surface to be disinfected. Usage/dosage:

Eoxide LQ 75 can be used for water disinfection.

Dosage rates:

Drinking water = depending on raw water quality between 0,05 and 0,3 ppm = 7 ml to 40 ml per 1000 liter of water.

Recommended contact time 15' - 30'

If needed chlorine dioxide can be neutralized by Sodium thiosulphate before to discharge.

#### Guidelines for hazard and first aid measures:

Identify the hazards / risks





Irritating to eyes and skin

Direct contact with Chlorine Dioxid causes eye and skin irritation. Inhalation of Chlorine Dioxid may cause respiratory tract irritation, coughing, wheezing and burns of the mucous membranes. Inhalation of large amounts may lead to pulmonary edema and bronchitis.

#### First aid :

| First Aid Measures          |   |
|-----------------------------|---|
| General indications         | <ul> <li>In event of serious problems call a doctor summon medical assistance urgently</li> </ul> |
| After Inhalation            | <ul> <li>Remove the victim into fresh air</li> </ul>  |
|                             | <ul> <li>Respiratory problems: consult a doctor/medical service</li> </ul>                        |
| After Skin Contact          | Rinse with water  |
|                             | <ul> <li>Soap may be used</li> </ul>  |
|                             | <ul> <li>Take victim to a doctor if irritation persists</li> </ul>                                |
| After Eye Contact           | <ul> <li>Rinse immediately with plenty of water</li> </ul>  |
|                             | <ul> <li>Take victim to an ophthalmologist</li> </ul>   |
| After Ingestion             | <ul> <li>Rinse mouth with water</li> </ul>  |
| Emergency medical treatment | <ul> <li>Immediately give lots of water to drink</li> </ul>                                       |

For toxicological information : phrases S-2, 23, 46, R-36 phrases, we advise you to check also paragraph 16 of MSDS..



#### Packing:

Liquid chlorine dioxide is stored in jars of 2/I ; 5/I ;10/I ; 100/I; 200I; 1.000/I and in HDPE tanks UV resistant and labeled.

#### Storage:

Jars and tanks of chlorine dioxide liquid will be stored in a dry, well ventilated space, away fro excessive heat and direct action of sunlight. It is preferable that the storage space will be fire resistant. Avoid chlorine dioxide storage in tight spaces and underground.

Jars or bottles should be filled only to 95% of their capacity.

Product solution has kinetic time of 30 to 45 days when stored in cool, protected from light space .

Persons employed to handle the product will have to be trained on and settlement risks. It is necessary to wear personal protective equipment.

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#### Warning:

Data presented in this document reflect the highest level of our experience and knowledge in that domain .

You should contact EOX International (<u>www.eox-international.com</u>) to check if the document was revised.

#### **Important:**

For better compliance of the product to your needs, we recommend carrying out tests before actual use product. We advise you to determine, in its own way, how suitable and safe handling, storage, use and disposal of product. Data are presented in good faith and reliable.