

WASTEWATER TREATMENT

TwinOxide® is effective as both a disinfectant and an oxidant in wastewater treatment. TwinOxide® has several distinct chemical advantages compared to the traditional use of chlorine in wastewater treatment.

TwinOxide® does not significantly hydrolyze in water, thus it retains biocidal activity over a broad pH range. TwinOxide® is non-reactive with ammonia and most nitrogen-containing compounds, and thus is effective at lower dose levels than chlorine. It destroys phenolics, simple cyanides and sulfides by oxidation.

For odor control, TwinOxide® will oxidize sulfides without the formation of colloidal sulfur. It is also used to oxidize iron and manganese compounds.

- Dosage Requirements

The required dosages will vary with water conditions and the degree of contamination present. For most municipal and other wastewater systems, a TwinOxide® residual concentration of up to 5 ppm is sufficient to provide adequate disinfection.

For sulfide odor control, between pH 5-9, a minimum of 5.2 ppm of TwinOxide® should be applied to oxidize 1 ppm of sulfide (measured as sulfide ion). For phenol destruction, at pH less than 8 a dosage of 1,5 ppm TwinOxide® will oxidize 1ppm phenol; at pH greater than 10, a dosage of 3,3 ppm TwinOxide® will oxidize 1 ppm phenol.

- Method Of Dosing

By adding the two components of TwinOxide® to an appropriate volume of tapwater the TwinOxide® 3% chlorine dioxide is produced. TwinOxide® should be applied to the processing system at a point, and in a manner which permits adequate mixing and uniform distribution. The feed point should be well below the water level to prevent volatilization of TwinOxide®. Avoid co-incident feeding of ClO₂ with lime or powdered activated carbon.

TWINOXIDE® CHLORINE DIOXIDE

- TwinOxide® Analysis

Residual TwinOxide® chlorine dioxide concentrations must be determined by substantiated methods which are specific for chlorine dioxide. Two suitable methods are published in *Standard Methods for the Examination of Water and Wastewater*:

4500- ClO₂ D DPD-Glycine Method
4500- ClO₂ E Amperometric Method II

- Packaging Sizes

Available in packaging providing 100L and 1000L of TwinOxide® 0.3% ClO₂ solution. If higher volumes are required Bulk containers can also be arranged upon request.

- Contact

For further information we cordially invite you to contact us:

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