TwinOxide International B.V.
Industrial Water Solutions

TWINOXIDE APPLICATION OVERVIEW II

Application	Disinfection Problems	Required	Dosage according to German Law
Water Factory, Drinking Water Treatment	• Biofilm building in pipelines of water company and user installations. • Germ Building in the filter(s). • Germ- and Biofilm building in the water reservoir.	• Storage Containers for TwinOxide • TwinOxide powder • Dosage Pump, • Injection Point, • Measure Pump, • Chlorine Dioxide sensor • Filter • Management Panel	• In the water factory 0,4 mg/l • In home appliance 0,2 mg/l
Maintenance & Repair in pipeline circuit	• Germ building requires disinfection (according to DVGW)	• Storage Containers for TwinOxide • TwinOxide powder • Feeding Station, • Recirculation Pump, • Test Kits	• 7 Liter per Cubic Meter Water • Stand Disinfection Time ca. 12 hours • Stand Disinfection of new piplines ca. 1 – 6 hours. • 1 - 6 Hours • Check with Test Kits
Renovation of Pipeline Net in houses, Hotels, Old Age Houses, Public buildings, etc.	Building of: • Legionella Pneumophila • Biofilm building • Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Dosage Pump • Injection Point • Test Kit • Foto Metric device	Starting Concentration: • 7 Liter TwinOxide per Cubic Meter Water • Check with Test Kits
Permanent Disinfection in Houses, Hotels, Public Buildings etc.	Excellent precautions against the formation of: • Legionella Pneumophila • Biofilm building • Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Contact Water Counter • Dosage Pump • Injection Point	• 0,2mg/L on the Tap • Photometric • Test sticks
Open Waterworks	Excellent precautions against the formation of: • Legionella Pneumophila Biofilm building Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Redox Sensor • Measure Value amplifier • Filter • Throttle Valve	700 – 900mV Redox Potential
Ground disinfection Swimming pool Filter	• Formation of organic encrustations • Dirty filter bed • Biofilm building	• Storage Containers for TwinOxide • TwinOxide powder • Feeding Pump for Chlorine Dioxide • Test sticks	• 10 Liter TwinOxide per Cubic Meter Filtervolume • Stand Time ca. 6 – 8 hours
Swimming Pool	• Bounded Chlorine • Biofilm Building • Chlorine usage (Poison) • THM's • Bacteria, Viruses • Back Flow Intervals • Water Consumption	• Storage Containers for TwinOxide • TwinOxide powder • Measure Water from under circuit • Dosage Pump • Injection Point • Mebrane covered Chlorine Dioxide sensor • Measure water reservoir • Electronic management	• 0,2 mg/l TwinOxide • 0,3 mg/l Chlorine

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Wash Installation for Cars, Trains etc.	• Biofilm Building • Odor • Bacteria, Viruses • Water Quality	• Storage Containers for TwinOxide • TwinOxide powder • Measure Water Reservoir • Measure Water Pump • Redox sensor • Dosage Pump • Injection Point • Electronic Management • Filter	750 mV – 900mV Redox Potential
Cooling Towers Cooling Circuits	• Biofilm Building • Bacteria, Viruses • Constriction of Pipeline • Cooling Capacity decreases	• Storage Containers for TwinOxide • TwinOxide powder • Measure Water Reservoir • Measure Water Pump • Redox sensor • Dosage Pump • Injection Point • Electronic Management • Filter	750 mV – 900mV Redox Potential
Water Reservoir Drinking Water Usage Water (‚Grey')	• Biofilm Building • Bacteria, Viruses • Organic encrustations	• Storage Containers for TwinOxide • TwinOxide powder • Contact Water counter • Dosage Pump • Injection Point • Electronic Management	• Drinking Water: 0,2 mg/L TwinOxide • Usage Water: 0,4mg/L TwinOxide
Water in Trains	• Biofilm Building • Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Contact Water counter • Dosage Pump • Injection Point (Permanent dosage)	• Drinking Water: 0,2 mg/L TwinOxide • Usage Water: 0,4mg/L TwinOxide
Air Treatment Systems	Building of: • Legionella Pneumophila • Biofilm building • Bacteria, Viruses • Circulation Water • Organic Encrustations	• Storage Containers for TwinOxide • TwinOxide powder • Measure Water Pump • Gas Sensor • Dosage Pump • Clorine Overdose Sensor • Injection Point • Electronic Security Management • Filter	TwinOxide level in the air NOT higher then 0,02mg/L
Legionella Prophylaxe in Therapy Baths	Building of: • Legionella Pneumophila • Biofilm building • Bacteria, Viruses • Circulation Water • Organic Encrustations	• Storage Containers for TwinOxide • TwinOxide powder • Measure Water from under circuit • Dosage Pump • Injection Point • Mebrane covered ClO2 sensor • Measure water reservoir • Electronic management	TwinOxide Level max 0,9mg/L
Poultry Slaughter	• Salmonella • Bacteria	• Storage Containers for TwinOxide • TwinOxide powder • Plunge Bath • Measure Water Pump • Dosage Pump • Clorine Overdose Sensor • Electronic Management	Up to 0,4 mg/L

Application	Disinfection Problems	Required	Dosage according to German Law
Egg Production	• Salmonella • Bacteria	• Storage Containers for TwinOxide • TwinOxide powder • Plunge Bath • Measure Water Sensor • Filter & Dosage Pump • Measure Water Pump • Electronic Management	
Cleaning In Place	• Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Spray Device	TwinOxide dosage 17 ml/L Water
Washing of Fruit & Vegetables	• Bacteria, Viruses	• Storage Containers for TwinOxide • TwinOxide powder • Spray Device or Plunge Bath • Measure Water Pump • Dosage Pump • Clorine Overdose Sensor • Electronic Management	

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