

71906-1

2-24-2003

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**ACCEPTED**

FEB 24 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 71906-1

**Peroxate™**



**Tiberian Technologies Inc.**

1698 Empire Avenue East Point, GA 30344  
404-768-9668

**Aqueous Solution with 40% Sodium Chlorate & 10% Hydrogen Peroxide  
A PRECURSOR CHEMICAL SOLUTION FOR USE ONLY IN THE "TST" CHLORINE DIOXIDE GENERATOR**

In addition to this precursor, the "TST" Chlorine Dioxide Generator requires a feedstock of 78% Sulfuric Acid to generate chlorine dioxide.

**-FOR INDUSTRIAL USE ONLY-  
KEEP OUT OF THE REACH OF CHILDREN**

**DANGER**

**STATEMENT OF PRACTICAL TREATMENT (FIRST AID)**

**"Have the Product container or label with you when calling a poison control center or doctor, or going for treatment." You may also contact 1-800-262-8200 for emergency medical treatment information.**

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Call A poison control center or doctor for further treatment**

**NOTE TO PHYSICIAN:** Probable mucosal damage contraindicate the use of gastric leverage

<u>ACTIVE INGREDIENTS</u>	<u>BY WT</u>	<u>Tiberian Technologies Inc.</u>
Sodium Chlorate	40.0%	1698 Empire Avenue
OTHER INGREDIENTS	60.0%	Atlanta, GA 30344
TOTAL	100 %	404-768-9668

EPA Reg. No.71906-1  
EPA Est. No.71906-GA-001

**PRECAUTIONNARY STATEMENTS**

**HAZARDS TO HUMAN AND DOMESTIC ANIMALS**

**DANGER. Corrosive.** Causes irreversible eye damage. Use of contact lenses is not recommended when handling this product. Do not get in eyes on skin or clothing. Wear protective eyewear (goggles or face shield). Wear protective clothing and neoprene gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic or highly toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**CHEMICAL HAZARDS**

Peroxate™ is a strong oxidizing agent. Do not contaminate with dirt, oils, or organic matter of any sort. Contamination may cause violent chemical reactions, fire and explosion. Clean up all chemicals spills immediately. Allowing spills to dry or concentrate may cause spontaneous combustion. In case of chemical spills, avoid body contact and wear appropriate protective equipment

**DIRECTIONS FOR USE**

**General Directions**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Peroxate™ is for use only in the "TST"™ Chlorine Dioxide Generator, a pesticide device installed to generate chlorine dioxide. Feed rates for Peroxate™ are determined by the operator to achieve the desired production rate for chlorine dioxide. As described below, the appropriate production rate will depend on the severity of contamination, the degree of control desired, the size of the system and residual necessary for effective control. For all uses, the point of feed of chlorine dioxide should be below the water level to prevent volatilization of the chlorine dioxide. Chlorine dioxide must be added to the water stream at a point where adequate mixing and uniform distribution can occur.

**Drinking Water Treatment**

This product is approved for use in water treatment facilities that produce potable drinking water in compliance with the Safe Drinking Water Act. A typical dosage of chlorine dioxide for water systems is between 0.5 and 5ppm on a continuous basis. Peroxate™ has been approved by the National Sanitation Foundation for use in drinking water systems.

**Industrial Process Water Uses**

This product is approved for the control of microbial, algal and mollusc populations in industrial process or wastewater at the sites listed below. The dosage of chlorine dioxide required is dependent on the specific use; see specific directions below. Peroxate™ may be used to treat the following aquatic sites:

**Recirculating and non-circulating cooling water.** To control microbial and algal slime in cooling water systems, an intermittent or continuous application may be used. If using a continuous feed, maintain residual chlorine dioxide concentrations of a minimum 0.1-1.0ppm. If using intermittent feed maintain a residual concentration of a minimum 0.1-5.0ppm. In recirculating systems chlorine dioxide should be added to the drip pan, cold-water well, or other points where adequate mixing and distribution can occur. To remove adult mollusks in once through cooling water systems, an intermittent dose of a minimum of 0.2-2.5 ppm is necessary; the exact dose is dependent on the infestation present. If a continuous dose is preferred, apply chlorine dioxide at rates that maintain a minimum of 0.25-2ppm in cooling water. To prevent settling and attachment of the free-swimming larvae of mollusks (veligers), apply a continuous feed to achieve a residual of a minimum of 0.1-0.5 ppm.

**Textile processing water and pulp and paper process water for paper that does not contact food:**

To control microorganisms that form slime in paper process water and that cause blockages of paper mill equipment and to oxidize slime buildup already present, chlorine dioxide may be applied in an intermittent or continuous dosage. Either method of application should maintain a residual concentration of a minimum 0.1-5.0ppm of chlorine dioxide in the process paper water. If the system is badly fouled, it must be cleaned prior to treatment with chlorine dioxide.

**Pasteurizer, cannery and retort water systems:** To control odor and reduce bacterial slime in cooling and warming waters such as canning, retort, and pasteurizer process water, chlorine dioxide may be added intermittently to achieve a dose of 0.4 ppm.

**Impounded lake, pond and reservoir water, including industrial wastewater:** To control microorganisms and algae that cause unacceptable odors and slime, these aquatic sites may be

treated with chlorine dioxide on an intermittent basis. Sufficient chlorine dioxide must be added to reach a residual; concentration of 5ppm, in order to achieve adequate control and slime caused by algae and microorganisms.

**Sewage and wastewater systems:** For (disinfection/sanitization) of sewage and wastewater, add chlorine dioxide to achieve a residual of up to 5ppm. To control odors caused by sulfides associated with sewage and wastewater, a minimum of 5.0ppm chlorine dioxide must be applied to oxidize 1ppm of sulfide (measured as sulfide ion) if the pH is between 5-9. A minimum of 1.5ppm chlorine dioxide will oxidize 1 ppm phenol if the pH is less than 8; if the pH is greater than 10, a minimum of 3.5 ppm chlorine dioxide is required.

**Gas and oil recovery injection water; fracturing system fluids:** To control sulfate-reducing bacteria that form colloidal sulfur or iron sulfides and bacterial slime, and to oxidize sulfides, a continuous or intermittent application of chlorine dioxide may be used. If using a continuous feed of chlorine dioxide, apply at rates slightly higher than the sulfide oxidative demand as determined by a sulfide demand study. If using an intermittent feed apply a shock dose of 200-3000 ppm chlorine dioxide. Please be certain that this product is not discharged into lakes streams, ponds, oceans or other waters.

**Ultrasonic tank water; photo processing wash water;** leather processing solutions: To control slime caused by microbial populations in these liquid systems, a residual chlorine dioxide concentration between 0.25 to 5.0ppm is necessary. Chlorine dioxide may be added intermittently or on a continuous basis to achieve the desired residual; the concentration maintained is dependent on individual systems.

**Agricultural Water Uses (NON-FOOD CONTACT):**

Peroxate™ is approved for use in the control of microbial populations in water for the following agricultural non-food contact uses:

Drinking water treatment for animals not meant for human consumption (e.g., show and research animals raised for fur or wool; horses, mules or donkeys). Treatment of drinking water tanks for livestock not meant for human consumption can be achieved by intermittent or continuous application of chlorine dioxide. Either method should be monitored, to achieve a residual concentration between 1.0-2.0ppm chlorine dioxide.

**Peroxate™ may also be used to generate chlorine dioxide for non-pesticidal uses:**

- |                       |  |
|-----------------------|--|
| Reducing Sludge       | Reducing Color   |
| Eliminating Odors     | Controlling scale and deposits   |
| Controlling corrosion | Reducing TOC (Total Organic Carbon)  |
|                       | Controlling iron and manganese   |
|                       | Destruction of odors caused by phenolics simple cyanides and Sulfides by Chemical Oxidation, |
|                       | Clarifying/precipitating organic and inorganic particles                                     |

**STORAGE AND DISPOSAL**

**STORAGE**

Unless delivered in bulk, store in the original container. Store at ambient temperature from 40°F to 100°F. Do not store with sulfuric acid precursor. Store in fire-resistant area separate from incompatible materials such as metals organic chemicals, combustible materials and dirt. Clean-up spills immediately.

**DISPOSAL OF WASTES**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning, if burned stay out of smoke.

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**WARRANTY**

TIBERIAN TECHNOLOGIES INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label when used in accordance with specific instructions issued by TIBERIAN TECHNOLOGIES, INC. in the OPERATORS MANUAL. For the "TST"™ Chlorine Dioxide Generator