**Biotrol 407**

**Biotrol 407** is an effective agent for controlling algae, bacteria and slime in condensing and cooling equipment in which recirculating water is used as the cooling media and in lined reservoirs or ponds which serve as the source of boiler feedwater or cooling water. Biotrol 407 can also be used to control bacterial slime and algae in decorative fountains, paper mill effluent water systems, and oilfield water systems.

**Active Ingredients:**
- Sodium hypochlorite: 7.45%
- Sodium bromide: 10.28%

**Inert Ingredients:**
- 82.27%

**Total Available bromine:** approximately 16%
**Total Available chlorine:** approximately 7%

**KEEP OUT OF REACH OF CHILDREN DANGER**

**FIRST AID**

In case of eye contact:
- 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 for at least 15 minutes.
- Call a poison control center or a doctor for treatment advice.

In case of skin or clothing:
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

In case of swallowed:
- Call a poison control center or a doctor immediately for treatment advice.
- **DO NOT INDUCE VOMITING.**
- Do not give anything to drink.
- Do not give any alcohol.
- If inhaled:
  - Move to fresh air.
  - If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or a doctor for further treatment advice.

**NOTE TO PHYSICIAN:**

Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container, label or MSDS with you when calling a poison control center or a doctor, or going for treatment.

**SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

**24 hr Emergency ChemTrec Number:** 800-424-9300

**US Patent No:** 7,045,153. Other U.S. and global patents pending.

**Distributed By:**

**U.S. Water Services**

330 South Cleveland Street
Cambridge, MN 55008

**EPA Reg No:** 563385-5-71675
**EPA Est No:** 63386-Ca-01

**DIRECTIONS FOR USE**

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

**BASIC GUIDELINES:**

As a general rule, the total bromine level should be checked every 7-10 days when using **Biotrol 407** further than a 30-foot test kit is one of the better available. Free bromine test kits can be obtained from your water supplier or paper and pulp mill process water systems where the manufactured product or paperboard may be used for food contact purposes.

**INITIAL DOSES:**

When the system is noticeably fouled, a precleaning may be necessary. Then apply sufficient **Biotrol 407** to achieve 2.4-15 ppm total bromine (1.6-6 ppm as bromate) to maintain system cleanliness. The total bromine level should be checked with a test kit and additional product applied until a reading of 10-15 ppm is obtained at the bleed-off point. Some systems may be maintained in satisfactory biological conditions by applying this dosage once per day while others will respond better to dosages less than once per day. Some systems may be maintained in satisfactory biological conditions by applying this dosage intermittently while others may require a continuous application.

**COOLING PONDS, LINED RESERVOIRS AND DECORATIVE FOUNTAINS:**

This product may be applied at the lined reservoir, pond, or fountain inlet or at a location where the water contains significant amounts of dissolved organics. Biotrol 407 should be used to maintain a total bromine level of 1-0.1 ppm in all parts of the reservoir or pond (two fluid ounces per 1000 gallons of water yields approximately 3.4 ppm of total bromine). Some systems may be maintained in satisfactory biological condition by applying this dosage once per day while others will respond better to dosages less than once per day. Some systems may be maintained in satisfactory biological condition by applying this dosage intermittently while others may require a continuous application.

**AIR WASHERS:**

(For use in California)

For control of microorganisms in industrial air washer systems add this product to the airwasher to provide a total bromine level of 1.0 ppm. Biotrol 407 should be used to maintain a total bromine level of 1-0.1 ppm in all parts of the reservoir or pond (two fluid ounces per 1000 gallons of water yields approximately 3.4 ppm of total bromine). Some systems may be maintained in satisfactory biological condition by applying this dosage once per day while others will respond better to dosages less than once per day.

**POLISHED WATER:**

**PULP AND PAPER MILL INFLUENT WATER SYSTEMS:**

(For use in California)

This product should be applied to the raw water intake prior to the filter house, coagulator, or process water. Feed at a dosage sufficient to provide a total bromine level of 1.0 ppm. Biotrol 407 should be used to maintain a total bromine level of 1-0.1 ppm in all parts of the reservoir or pond (two fluid ounces per 1000 gallons of water yields approximately 3.4 ppm of total bromine). Some systems may be maintained in satisfactory biological condition by applying this dosage intermittently while others may require a continuous application. This product may be used in pulp and paper influent water systems where the manufactured paper or paperboard may be used for food contact purposes.

**PULP AND PAPER MILL PROCESS WATER SYSTEMS:**

(For use in California)

This product should be added to a paper making system at a point of possible mixing such as the beaters, brake chest pump, save-all tank, or white water tank. Feed at a dosage sufficient to provide a total bromine level of 4.8 ppm. Biotrol 407 at a dosage of two fluid ounces per 1000 gallons of water gives a total bromine level of 3.4 ppm of total bromine, but higher dosages may occasionally be required to provide the desired bromine level throughout the system. Some systems may be maintained in satisfactory biological condition by applying this dosage intermittently while others may require a continuous application. **Biotrol 407** may be used in pulp and paper mill process water systems where the manufactured paper or paperboard may be used for food contact purposes.

**COATINGS AND SECONDARY CONTAMINATION SYSTEMS, DRILLING MUDS AND PACKER FLUIDS:**

(Not for use in California)

This product may be used to treat water used in primary or secondary oil or gas recovery systems to control the growth of anaerobic sulfide- or methanogens. In anaerobic sulfide- or methanogens, **Biotrol 407** may be used in seawater or freshwater, recycled or disposal/recovery systems, muds or fluids. **Biotrol 407** controls biological and slime deposits on equipment and piping, and filters associated with oilfield and gasfield systems. It also controls slime deposits throughout the formation. Add sufficient amount of **Biotrol 407** to achieve satisfactory biological control. Initial recommended total bromine levels of 2.0 to 3.0 ppm as bromate should be used. A dosage of two fluid ounces per 1000 gallons of water yields approximately 3.4 ppm of total bromine.

**NOTE:** Halogen dosages listed in the various applications are expressed as bromine. For use in California the half life test kits for ozone and chlorine give values in terms of chlorine, simply multiply the reading from the test kit (as chlorine) by 2.23 in order to obtain the bromine equivalency listed in these directions.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER, CORROSIVE.** Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin or on clothing. Wear protective eyewear such as face shield or safety glasses and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gums, or using tobacco. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, canyons, oceans, or public waters unless in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product into sewers without previously notifying the local treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA.

**STORAGE AND DISPOSAL:** Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large volumes of water. Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

**Pesticide Disposal:** Pesticide disposal wastes are acutely hazardous. Improper disposal of these wastes can cause ground water contamination. Decontamination of these wastes cannot be accomplished by use according to label instructions. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Treatment, Storage and Disposal Facility for proper disposal procedures.

**CONTAINER DISPOSAL:** PLASTIC CONTAINERS: Non-refillable container. Do not use this container to hold materials other than pesticides or dilute pesticides (rinse). After emptying and cleaning, it may be allowable to temporarily hold or otherwise pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Clean container promptly after emptying. Offer for recycling if available. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Store the container on its end and tip it back and forth several times. Empty the rinse into application equipment or a mix tank or store rinse for later use or disposal. Repeat this procedure two more times.

**Net Contents:** Lbs / LOT #: elsewhere on package

**DOT:** UN1760, Corrosive, Liquid, n.o.s. (bromide salts), 8, PG III

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