



ACCEPTED  
TETRA MAY 25 2000

Under the Federal Insecticide, Fungicide, and  
Rodenticide Act an agreement for the  
residue, registration number

2214-12

# BioRid™ 46i

Sodium Bromide Solution

## DIRECTIONS FOR USE

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

**BioRid™ 46i** is used as a disinfectant, sanitizer, slimicide, bactericide, algacide, fungicide and molluscicide in re-circulating and once-through cooling water systems, brewery/cannery and pasteurizing systems, wastewater systems, water treatment systems, food processing systems, domestic and commercial non-potable water systems, hot tubs and spas and pulp and paper mills. It is to be used in conjunction with an oxidant such as sodium hypochlorite (12.5%) or chlorine gas (99.9%) to produce hypobromous acid. **BioRid™ 46i** may be added at system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. Consult your feeder manufacturer for correct procedure and proper use of the feeder equipment.

**Hot Tubs and Spas:** Initial Dose: With pump running, add 3.0 oz. of **BioRid™ 46i** per 5000 gallons of water, or as needed to achieve a bromine residual of 1.0 to 3.0 ppm when measured with a suitable test kit approximately five minutes after treatment. Maintain pH between 7.4 - 7.8.

**Subsequent Dose:** On a weekly basis, add sufficient **BioRid™ 46i** to maintain a bromine residual of 1.0 to 3.0 ppm when measured with a suitable test kit. Maintenance of a bromine residual is dependant on ambient temperature, light intensity and bather load, and requires frequent checks with a suitable test kit. Maintain pH between 7.4 - 7.8. When used in conjunction with another product, always follow the label directions on that product.

**Wastewater Systems:** When used as directed, **BioRid™ 46i** effectively disinfects wastewater effluent. The quantity of **BioRid™ 46i** required varies with the degree of fouling. Add sufficient **BioRid™ 46i** and chlorine or sodium hypochlorite to achieve residual bromine levels of 0.3 ppm to 2.0 ppm when measured approximately five minutes after treatment.

Depending on the construction of the wastewater system, **BioRid™ 46i** can be effectively added to one or more different locations in the system. Frequently, the compound is added to wastewater receiving secondary treatment at a contact tank preceding the effluent discharge or at the influent of the final clarifier.

The disinfection of sewage effluent must be evaluated by determining that the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the MPN (Millipore-Nutrient) procedure, of the disinfected effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

**Re-circulating Cooling Water Systems Including Air Washers and Pasteurizing Systems:** When used as directed, **BioRid™ 46i** effectively controls bacteria, fungi, algae, slimes, related odors and the growth and settlement of mollusks such as zebra mussels (*Dreissena*) and Asiatic Clams (*Corbicula*) in commercial and industrial cooling towers, heat exchange systems, industrial scrubbing systems, brewery/cannery and pasteurizing systems, evaporative condenser water systems, air wash water systems, food processing water systems, pulp and paper mills, and domestic and commercial non-potable water systems.

**Industrial Once-Through Cooling Water Systems:** When used as directed, **BioRid™ 46i** effectively controls bacteria, fungi, algae, slimes, related odors and the growth and settlement of mollusks such as the zebra mussel (*Dreissena*) and Asiatic Clams (*Corbicula*) in re-circulating and once-through fresh and sea water cooling systems. Apply **BioRid™ 46i** and chlorine or sodium hypochlorite to the system inlet water or before any other contaminated area in the system.

**Dosage Rates:** Initial Dose: When the system is noticeably fouled, apply sufficient **BioRid™ 46i** and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 2.0 ppm or as needed to maintain control. A 0.5 to 2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 1.8 to 7.6 lbs. of chlorine gas (99.9%) or 1.5 to 6.2 gallons sodium hypochlorite (12.5%) for each gallon of **BioRid™ 46i**.

**Subsequent Dose:** When microbial control is evident, apply sufficient **BioRid™ 46i** and chlorine or sodium hypochlorite to achieve a residual bromide level of 0.5 to 1.0 ppm or as needed to maintain control. A 0.5 to 2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 1.8 to 7.6 lbs. of chlorine gas (99.9%) or 1.5 to 6.2 gallons sodium hypochlorite (12.5%) for each gallon of **BioRid™ 46i**.

This product may be added to the system either continuously, intermittently, or as needed. The frequency of feeding and duration of the treatment will depend on the severity of the problem. It is recommended that this product always be used in a manner such that effluent discharges meet NPDES guidelines.

## PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

### CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. 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.

### PHYSICAL AND CHEMICAL HAZARDS

**BioRid™ 46i** is not flammable. Avoid contact with strong oxidizers (other than sodium hypochlorite and chlorine), acids, alkaloidal and heavy metal salts.

### STORAGE AND DISPOSAL

**Storage:** Store drums in a well ventilated, dry area. Product should be stored at 50°F or above.

**Disposal:** Do not contaminate water, food or feed by storage or disposal. Waste resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Triple rinse container (or equivalent), then offer for recycle, reconditioning, or puncture and dispose of in a sanitary landfill, or if allowed by state and local authorities, by burning. Burn only if allowed, and if burned, stay out of smoke.

### NFPA RATINGS:

HEALTH = 0, FIRE = 0, REACTIVITY = 0

Conditions of Sale and Warranty: TETRA Technologies, Inc. warrants that this product conforms to its chemical description. TETRA Technologies makes no other express or implied warranties either of fitness or merchantability for a particular use. Handling, storage and use of the product by Buyer or User are beyond the control of TETRA Technologies and the Seller. Risks such as ineffectiveness or other unintended consequences resulting from, but not limited to, failure to follow label directions will be assumed by the Buyer or User. In no case will TETRA Technologies or Seller be held liable for consequential, special or indirect damages resulting from the handling, storage or use of this product.

FOR USE AS A DISINFECTANT, SANITIZER,  
SLIMICIDE, BACTERICIDE, ALGAECIDE,  
FUNGICIDE, AND MOLLUSCIDIC IN WATER  
TREATMENT APPLICATIONS.

### ACTIVE INGREDIENT:

Sodium Bromide.....45.3%

INERT INGREDIENTS.....54.7%

*BioRid™ 46i is a water based, non-flammable product*

KEEP OUT OF REACH OF CHILDREN

## CAUTION

Prolonged eye and skin contact may cause severe irritation.

### STATEMENT OF PRACTICAL TREATMENT

For contact with eyes: Flush eyes with plenty of water. If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists. If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. If person is unconscious, do not give anything by mouth, and do not induce vomiting.

In case of emergency endangering life or property involving this product, please call 1 (800) 424-9300, CHEMTREC (24 Hour Emergency Response).

EPA Registration Number 2214-12

EPA Establishment Number 464-MI-003

Net contents \_\_\_\_\_ lbs.

See Side Panels for Additional Precautionary Statements

2214-12

05/25/2000

111