

2214-15

10/24/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 24, 2012

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Larry Russell  
Manager of HSEQ  
TETRA Technologies, Inc.  
24955 Interstste 45 North  
The Woodlands, TX 77380

Subject: **BioRid® 43i**  
EPA Registration Number: 2214-15  
Application Date: September 24, 2012  
Receipt Date: September 26, 2012

Dear Mr. Russell:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide (FIFRA), as amended, and PR Notice 90-10 is acceptable.

**Proposed Amendment**

Registrant is amending product label language in the Direction for Use section.

**General Comments**

The change of the word "bromine" to "bromide" is acceptable.

If you have further questions concerning this letter, then please contact Glen McLeod by telephone at (703) 347-0181 or by email at [mcleod.glen@epa.gov](mailto:mcleod.glen@epa.gov)

When you are submitting information or data in response to this letter, please send a copy of this letter to accompany the submission in order to facilitate processing.

Sincerely,

Monisha Harris  
Product Manager (32)  
Regulatory Management Branch II  
Antimicrobials Division (7510P)



# BioRid<sup>®</sup> 43i

Sodium Bromide Solution

**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 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.

### PHYSICAL AND CHEMICAL HAZARDS

BioRid<sup>®</sup> 43i 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

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**ACCEPTED**  
OCT 24 2012  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 2214-15

**FOR USE AS A DISINFECTANT, SANITIZER, SLIMICIDE, BACTERICIDE, ALGAEICIDE, FUNGICIDE, AND MOLLUSCIDICIDE IN WATER TREATMENT APPLICATIONS.**

**ACTIVE INGREDIENT:**

Sodium Bromide	43.0%
INERT INGREDIENTS	57.0%
<b>TOTAL</b>	<b>100.0%</b>

1 Contains 33% available bromine  
BioRid<sup>®</sup> 43i is a water based, non-flammable product

## KEEP OUT OF REACH OF CHILDREN

### CAUTION

Prolonged eye and skin contact may cause severe irritation.

### FIRST AID

**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 five minutes, then continue rinsing eye. 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 swallowed:** Call a poison control center or doctor immediately for treatment advice. 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.

Have the product container or label with you when calling a poison control center or going for treatment. You may also contact CHEMTREC at 1 (800) 424-9300 (24 Hour Emergency Response) for medical treatment or other emergency involving life or property.

EPA Registration Number 2214-15  
EPA Establishment Number 2214-AR-001  
Net contents \_\_\_\_\_ lbs.

See Side Panels for Additional Precautionary Statements

## DIRECTIONS FOR USE

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

BioRid<sup>®</sup> 43i is used as a disinfectant, sanitizer, slimicide, bactericide, algaeicide, 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 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<sup>®</sup> 43i 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.

**Wastewater Systems:** When used as directed, BioRid<sup>®</sup> 43i effectively disinfects wastewater effluent. The quantity of BioRid<sup>®</sup> 43i required varies with the degree of fouling. Add sufficient BioRid<sup>®</sup> 43i 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<sup>®</sup> 43i 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<sup>®</sup> 43i 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<sup>®</sup> 43i 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<sup>®</sup> 43i 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<sup>®</sup> 43i and chlorine or sodium hypochlorite to achieve a residual bromide 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<sup>®</sup> 43i.

**Subsequent Dose:** When microbial control is evident, apply sufficient BioRid<sup>®</sup> 43i 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<sup>®</sup> 43i.

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.