

PM 32 2214-12

11/4/98

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (75107)
121 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
2214-12

Date of Issuance:
NOV 4 1998

NOTICE OF PESTICIDE:
X Registration
 Reregistration

Term of Issuance:
Conditional

Name of Pesticide Product:
Biorid™ 46i

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Stewart Pesticide Registration Associates, Inc.
Agent for TETRA Technologies, Inc.
1901 North Moore Street, Suite 603
Arlington, VA 22209

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to the use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 2214-12".
4. Submit two copies of the revised final printed label CSF for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Robert S. Brennis
Product Manager 32

Date:

NOV 4 1998

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ACCEPTED
with COMMENTS
in EPA Letter Dated:

NOV 4 1998

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

2214-12

BioRid™ 46i

Sodium Bromide Solution

**FOR USE AS A DISINFECTANT, SANITIZER, SLIMICIDE, BACTERICIDE, ALGAECIDE,
FUNGICIDE, AND MOLLUSCICIDE 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.

TETRA Technologies

25025 I-45 North

The Woodlands, Texas 77380

Phone: (281) 367-1983

Fax: (281) 364-2270

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 ~~1.0~~ lbs.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

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*(SIDE PANEL)***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 the 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.

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(SIDE PANEL)

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, 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.

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.

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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 bromine 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.

The 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 should always be used in a manner such that the effluent discharges meet the NPDES guidelines.

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.