

5185-467

09/14/2000

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 14 2000

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Mark Jernigan  
Bio-Lab Inc.  
P.O. Box 1489  
Decatur, GA. 30031-1489

SUBJECT: March 28, 2000  
NABR43-E  
EPA Registration 5185-467

Dear Mr. Jernigan:

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided that you:

1. Correct typo, change seed to **seek** in the First Aid section.
2. In the use sites, change "When used as directed..." to "When used **in conjunction with an oxidant...**"
3. In the use sites where dosage rates of the oxidant are described add **or**, at end of 1).
4. Under Sanitization of Fruit and Vegetable Wash Water, change the beginning of the last paragraph to read "This product **and oxidant...**"
5. Under Drip Irrigation Systems, change the last sentence from "samples from the system" to "**samples at the emitter farthest from the injection pump.**"

A copy of our review of MRID 450782-01 is enclosed. Two copies of the finished labeling must be submitted prior to releasing the product for shipment. If you have any questions regarding this letter, please contact Tom Luminello of my staff at (703) 308-8075.

Sincerely yours,

A handwritten signature in black ink, appearing to read "R. Brennis".

Robert S. Brennis  
Product Manager (32)  
Regulatory Management Branch II  
Antimicrobial Division (7510-C)

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{All text in brackets [xxx] is optional and may or may not be included on a final label.}  
{All text in braces {xxx} is administrative and will not appear on a final label.}

### NABR43-E

[For use as a Disinfectant, Sanitizer, Bactericide, Fungicide, Algicide, and Mollusk Control Agent, and for Control of Microbial Slimes in: Recirculating Cooling Water Systems, Once-Through Cooling Water Systems, Wastewater Treatment Systems, Brewery Pasteurizers, Drip Irrigation Systems, Pulp and Paper Mill Water, and Fruit and Vegetable Wash Water.]

ACTIVE INGREDIENT:		
Sodium bromide		43.0%
OTHER INGREDIENTS:		57.0%
TOTAL		100.0%

KEEP OUT OF REACH OF CHILDREN

### CAUTION

**FIRST AID:**

IF IN EYES: Flush eyes with cold water for at least 15 minutes. If irritation persists, <sup>typo</sup> seek medical attention immediately.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Call physician or Poison Control Center. Do not induce vomiting. Do not drink alcohol. Drink at least 8 ounces of water. Do not give anything by mouth to an unconscious person.

[IN CASE OF MEDICAL EMERGENCY, CALL [1-303-623-5716] [1-877-800-5553] [telephone number supplied by supplemental registrant].]

SEE OTHER PRECAUTIONS ON SIDE PANEL

Net Weight \_\_\_\_\_  
Lot No. \_\_\_\_\_

EPA Reg. No. 5185-467  
EPA Est. No. 5785-AR-2

**BIO-LAB, INC.**  
P.O. Box 1489  
Decatur, GA 30031

**ACCEPTED**  
with COMMENTS  
in EPA Letter Dated:

SEP 14 2000

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
the registrant is responsible  
for the accuracy of the  
information on EPA Form 853

5185-467

**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label and use strictly in accordance with precautionary statements and directions.

**RECIRCULATING COOLING WATER SYSTEMS, INCLUDING AIR WASHERS AND BREWERY PASTEURIZERS:** *in conjunction with an oxidant*

When used ~~as directed~~, this product effectively controls algal, bacterial, and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in commercial and industrial cooling towers; influent water systems such as flow-through filters, cooling ponds, canals, and lagoons, heat exchange water systems, air washers, pasteurizers, retort systems, and industrial water scrubbing systems.

**DOSAGE RATES.** Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; *or,*
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

**Initial Dose:** When the system is noticeably fouled, add 0.0003 to 0.022 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.042 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.007 to 0.034 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

**Subsequent Dose:** When microbial control is evident, add 0.00014 to 0.022 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.004 to 0.044 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.003 to 0.034 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

**SANITIZATION OF FRUIT AND VEGETABLE WASH WATER:**

When used ~~as directed~~, this product effectively controls algal, bacterial, and fungal slime in water used to wash and transport fruits and vegetables. *in conjunction with AN oxidant*

**DOSAGE RATES.** Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; *or,*
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Add sufficient amount of mixed product/oxidant solution to achieve a residual bromine level of 0.5 to 5.0 parts per million. For 0.5 parts per million add 0.00051 gallons of product and 0.0018 gallons of (12.5%) bleach or 0.0019 pounds gas chlorine per 1,000 gallons of water treated.

*and oxidant*  
This product should be added at a rate not to exceed a dosage of 55 parts per million (35.8 gallons of this product per one million gallons of water treated). The use of this product under this application must be followed by a potable water rinse to remove, to the extent possible, residue of the chemical.

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amended, for the pesticide,  
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5185-467

*- in conjunction with an oxidant*

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**ONCE-THROUGH COOLING WATER AND WASTE WATER TREATMENT SYSTEMS:**

When used ~~as directed~~, this product effectively controls algal, bacterial and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in once-through fresh and sea water cooling systems, cooling ponds, canals, and lagoons; and disinfects secondary and tertiary wastewater treatment systems.

**DOSAGE RATES.** Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; *OR*
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

**Initial Dose:** When the system is noticeably fouled, add 0.0007 to 0.044 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.02 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.02 to 0.07 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

**Subsequent Dose:** When microbial control is evident, add 0.0003 to 0.044 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.006 to 0.07 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

**DRIP IRRIGATION SYSTEMS:**

For the control of algal and microbial slimes in drip irrigation distribution lines, preventing plugging and allowing uniform distribution of water.

**DOSAGE RATES:** Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) *←* 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; *OR*
- 2) 1.4 to 23.2 gallons of sodium hypochlorite (12.5% available chlorine) per gallon of sodium bromide solution.

Add sufficient amount of this product and oxidize with either gas chlorine or sodium hypochlorite solution to achieve a residual bromine level of 0.2 to 5 ppm as needed to maintain control of the system. For 0.2 ppm bromine add 0.000464 gallons of this product mixed with 0.0016 gallons 12.5% bleach or 0.00168 lbs. gas chlorine per 1,000 gallons water treated. This product can be added whenever chlorination is applied.

**MEASUREMENT OF BROMINE RESIDUALS.** Treatment levels of this product can be measured with a test kit. Bromine residuals should be measured in water taken from the treated system while it is running. Tests should be made immediately after drawing water samples ~~from the system.~~

**PULP AND PAPER MILLS:**

When used ~~as directed~~ this product effectively controls algal, bacterial, and fungal slime in pulp and paper mill fresh and sea water influent water systems; cooling water systems, wastewater treatment systems, service water systems, white water systems, non-potable water systems, and other process water.

**DOSAGE RATES:** Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; *OR*
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Add sufficient amount of mixed product/oxidant solution to achieve a residual bromine level of 0.5 to 5.0 parts per million. For 0.5 parts per million add 0.00051 gallons of product ~~and~~ *ADDED* 0.0016 gallons of (12.5%) bleach or 0.00168 pounds gas chlorine per 1,000 gallons of water treated.

*in conjunction with an oxidant, at the emitter for the injection pump.*

with COMMENTS  
in EPA Letter Dated:

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Treatment levels of this product and oxidant can best be measured with test kits for either bromine or chlorine. Tests should be made immediately after drawing water samples from the system. Use test kits according to directions.

1. When a bromine test kit is used, results can be read directly as parts per million bromine.
2. When a chlorine test kit is used, results can be expressed in terms of bromine by multiplying chlorine values by the conversion factor 2.25.

This product weighs 12.2 pounds/gallon at 70° F.

**STORAGE AND DISPOSAL:**

**STORAGE.** Keep product dry in tightly closed original container when not in use. Store in a cool, dry, well ventilated area. Product should be stored at 50° F or above.

**DISPOSAL.** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **DO NOT REUSE EMPTY CONTAINER.** Triple rinse the container (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate. Burn only if allowed by state and local authorities. If burned, stay out of smoke.

**PRECAUTIONARY STATEMENTS:**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS.** CAUTION. Avoid contact with skin and clothing. Wash with soap and water after handling. Remove contaminated clothing and wash before reuse.

**PHYSICAL AND CHEMICAL HAZARDS:**

Sodium bromide is not flammable. However, in fires fueled by other materials, hydrogen bromide or bromine may be released. In case of fire, wear self-contained breathing apparatus.

**ENVIRONMENTAL HAZARDS:** This pesticide 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.

NOTE: Buyer assumes all responsibility for safety and use not in accordance with directions.

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**with COMMENTS**  
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Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
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