



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 M St SW
Washington DC 20460

EPA Reg Number 5185 450
Date of Issuance 27

Term of Issuance Conditional

Name of Pesticide Product
NABR46-E

NOTICE OF PESTICIDE
 x Registration
 Reregistration

(under FIFRA as amended)

Name and Address of Registrant (include ZIP Code)

BioLab, Inc
P O Box 1489
Decatur, GA 30031

Note Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to 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 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. Change the label by revising the EPA Registration Number to read, "EPA Reg No 5185 450"
3. Submit two copies of the revised final printed label 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


Date
2/25/97

277

NABR46 E

ACTIVE INGREDIENT

Sodium bromide

46.0%

INERT INGREDIENTS

54.0%

Total

100.0%

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENTS OF PRACTICAL TREATMENT IF SWALLOWED Drink promptly large quantities of water DO NOT induce vomiting Avoid alcohol Never give anything by mouth to an unconscious person Call a physician or poison control center immediately IF IN EYES Hold eyelids open and flush with a steady, gently stream of water for 15 minutes Get medical attention IF ON SKIN Wash with plenty of soap and water Get medical attention IF INHALED Remove victim to fresh air If not breathing give artificial respiration preferably mouth to mouth Get medical attention IN CASE OF MEDICAL EMERGENCY, CALL 1 303 623 5716

SEE OTHER PRECAUTIONS ON SIDE PANEL

Net Weight _____
Lot No _____

EPA Reg No 5185 U L 14
EPA Est No 5785 AR 01

BIOLAB, INC
P O Box 1489
Decatur GA 30031

ACCEPTED
WITH COMMENTS
by EPA Letter dated

FEB 27

Under the Federal Insecticide
Fungicide and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No. 5185-457

BEST AVAILABLE COPY

RECIRCULATING COOLING WATER SYSTEMS

When used as directed this product effectively controls algal, bacterial 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 evaporative condensers industrial water scrubbing systems cooling ponds influent water systems including flow through filters and lagoons heat exchangers industrial water scrubbing systems

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water this product and oxidant is achieved

ONCE-THROUGH COOLING WATER

When used as directed, this product effectively controls algal, bacterial and fungal slimes 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

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water this product and oxidant is achieved

WASTEWATER TREATMENT SYSTEMS

When used as directed this product effectively disinfects controls algal bacterial and fungal slimes and controls the settlement and growth of mollusks such as the zebra mussel (Dreissena) or the Asiatic clam (Corbicula) in secondary and tertiary wastewater treatment systems

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution,
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water this product and oxidant is achieved

BEST AVAILABLE COPY

PASTEURIZERS/WARMER/CANNERY COOLING WATER SYSTEMS

When used as directed this product effectively controls algal, bacterial and fungal slime in brewery pasteurizer water brewery processing water brewery warmer water cannery cooling canal water cannery package warmers cannery pasteurizer water and retort cooling water

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water, this product and oxidant is achieved

AIR WASHERS

When used as directed this product effectively controls algal, bacterial, and fungal slime in commercial and industrial air washer systems

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water this product and oxidant is achieved

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 and other process water

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 0.5 to 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied

Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water, this product and oxidant is achieved

BEST AVAILABLE COPY

FRUIT AND VEGETABLE WASH

When used in combination with an oxidant this product can be used for the wash and transport of fruits and vegetables

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

Add this product to the system at a 1 0 to 1 0 sodium bromide/oxidant mole ratio For example

- 1) 3 8 pounds of chlorine gas (99 9%) per gallon of sodium bromide solution
- 2) 3 0 gallons sodium hypochlorite (12 5% available chlorine) solution per gallon of sodium bromide solution

This product and oxidant should be added at a rate to not to exceed a dosage of 55 ppm of this product (33 gallons of this product per one million gallons of water treated) This product may be continuously metered to Chlorinator eductor water or mixed with a NaOCI solution for activation 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

SEWAGE SYSTEMS

When used as directed, this product effectively controls algal bacterial, and fungal slime in sewage systems including leach fields tank lines lagoons and sewage effluent water, sewers, sewage effluent water cesspools septic tanks sewage settling ponds sludge beds storm drains, and street culverts

DIRECTIONS FOR USE

It is a violation of federal law to use this product in any manner inconsistent with its labeling Read entire label and use strictly in accordance with precautionary statements and directions

Add this product to the system at a 0 125 to 2 0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99 9%) per gallon of sodium bromide solution
- 2) 1 6 to 26 gallons sodium hypochlorite (12 5% available chlorine) solution per gallon of sodium bromide solution

The amount of this product necessary to disinfect depends on the concentration and conditions of the final effluent Raw sewage should be treated before it has reached the septic state Approximately 30% of the bromine demand of sewage is due to settled solids, 30% to dissolved solids and 40% to suspended and colloidal solids Disinfection should be based on laboratory checks including bacteriological checks as a safeguard Generally disinfection can be achieved when the bromine residual (after 15 to 30 minutes contact time) is between 1 4 2 3 ppm Residual bromine and time of contact can be used as the determining factors to assure disinfection These factors can be used after experience with different types of treated sewage is sufficient to establish a relationship between the residual bromine content of the final effluent and the contact time necessary to ensure the desired bacteriological results Bacteriological testing should be conducted periodically to ensure that conditions have not changed Treat sewage near the influent detention basin The feed rate for this product must be adjusted to the higher dosages usually required for sewage practices Where temporary disinfection prior to dilution in a body of water is desired the following will generally suffice Raw sewage 23 68 ppm bromine Primary treated sewage 11-45 ppm bromine Sewage after primary and secondary treatment (or secondary treatment alone) 5 11 ppm Confirm the efficacy of these levels using bacteriological testing in your system

COMMERCIAL AIR CONDITIONER/REFRIGERATION CONDENSATE AND DEHUMIDIFIER BASINS OR DRIP PANS

When used as directed this product effectively controls algal bacterial and fungal slime in air conditioner/refrigeration condensate water systems (air conditioner water pan coil drain water refrigeration water, evaporative cool pads and air conditioner vats and dehumidifier basins)

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water, this product and oxidant is achieved

OIL RECOVERY DRILLING MUDS AND PACKER FLUIDS

When used as directed this product will control the growth of bacteria such as anaerobic sulfate forming bacteria (Desulforbriio cesulfuricans) and aerobic slime forming bacteria (Pseudomonas sp and Bacillus sp) which impair the efficiency of the muds and fluids

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution

Add sufficient amount of this product directly to the drilling muds and packer fluids and oxidize with either gas chlorine or sodium hypochlorite solution to achieve a residual bromine level of up to 5 ppm or as needed to maintain control of the system Fracturing fluids may be added and premixed prior to the fracturing operation or may be added directly to the blender during the operation Be sure rapid mixing of the treated water with this product and oxidant is achieved

SECONDARY OIL RECOVERY SYSTEMS

This product may be used in secondary oil recovery water systems such as oil field water flood or salt water disposal systems for the control of sulfate reducing bacteria and aerobic slime forming bacterial which impair the efficiency of the system

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 up to 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water with this product and oxidant is achieved

BEST AVAILABLE COPY

LAKES, PONDS, RESERVOIRS, ORNAMENTAL PONDS AND FOUNTAINS (WITHOUT HUMANS OR WILDLIFE)

When used as directed this product effectively controls algal bacterial and fungal slime in lakes ponds reservoirs ornamental ponds and fountains

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

Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio For example

- 1) 2 to 32 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution
- 2) 1.6 to 26 gallons sodium hypochlorite (12.5% available chlorine) solution 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 5 ppm or as needed to maintain control of the system This product can be added whenever chlorination is applied Feed this product either before or after the oxidant injection point into the water to be treated Be sure rapid mixing of the treated water, this product and oxidant is achieved

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 (Pails/drums) 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

DISPOSAL (Bags) Completely empty bag into application equipment Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning If burned, stay out of smoke

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS **WARNING** Irritation may develop from eye and skin exposure Avoid contact with eyes Wear gloves and safety goggles Wash contaminated clothing 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 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

OPTIONAL TEXT

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 ppm 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

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

BEST AVAILABLE COPY