

DM 31

FEB 11 1999

Edward W. Lyle  
AmeriBrom, Inc.  
52 Vanderbilt Avenue  
New York, NY 10017

Subject: Bromide Plus  
EPA Registration No. 8622-49  
Amendment Dated September 9, 1998

Dear Mr. Lyle:

This letter is in response to your request to modify the "Directions For Use" to add three chlorinated isocyanurate compounds as activators (oxidants) to the Bromide Plus label.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable subject to the comment listed below.

Please correct the typographical error under the "Subsequent Dose" rates heading. The Subsequent Dose rate under the Directions for Use headings "Industrial Recirculating Cooling Water Systems", "Once-Through Industrial Cooling Water Systems" and "Pulp and Paper Mills" differ from the last accepted label. The last accepted label reads "...the 'active' residual bromine level (0.5-5.0ppm) the proposed label calculates the residual bromine level at (0.5-6.0ppm). The dosage calculations for the additional oxidants only covers the "Initial Dose" rates.

A stamped copy of your labeling is enclosed for your records. One copy of the finished labeling must be submitted prior to releasing the product for shipment.

If you have any questions regarding this letter, please contact Wanda Mitchell at (703) 308-6345.

Sincerely,



Robert S. Brennis  
Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7504C)

CONCURRENCES							
SYMBOL	7510C						
SURNAME	Mitchell						
DATE	2-11-99						

**PRECAUTIONARY STATEMENTS**  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**

HARMFUL IF SWALLOWED  
HARMFUL IF ABSORBED THROUGH THE SKIN  
AVOID BREATHING DUST  
AVOID CONTACT WITH EYES, SKIN, CLOTHING

Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. 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.

**CHEMICAL AND PHYSICAL HAZARDS**

Avoid contact with strong oxidizers (except when in use), acids, alkalis, and heavy metal salts.

**DO NOT SMOKE, DRINK, OR EAT WHEN HANDLING**

**DIRECTIONS FOR USE**

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

BROMIDE PLUS is to be used in conjunction with an oxidant such as sodium hypochlorite (12.5%), chlorine gas (99.9%), trichloro-s-triazinetrione (99.0%), sodium dichloro-s-triazinetrione (99.0%), or sodium dichloro-s-triazinetrione dihydrate (99.0%) to produce hypobromous acid. BROMIDE PLUS may be added at the system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. BROMIDE PLUS can be added whenever chlorination is applied, for all uses. Consult your feeder manufacturer for correct procedure and proper use of feeder equipment.

**INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS**

Use effectively at dosages recommended to achieve exposures to 0.5-5.0 parts per million (ppm) of "active" residual bromine, or as needed to maintain control of algal, bacterial and fungal slimes in commercial and industrial cooling towers, heat exchange water towers, industrial water scrubbing systems, and influent systems such as flow-through filters, lagoons, etc.

**Dosage Rates**

**Initial Dose:** When noticeably fouled, add sufficient BROMIDE PLUS and oxidant to achieve the "active" residual bromine level (0.5-5.0 ppm), measured about 5 minutes after treatment. A 0.5-2.0 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 1.5-6.0 pounds of chlorine gas (99.9%), 1.3-5.2 gallons NaOCl (12.5%), 1.7-6.7 pounds of trichloro-s-triazinetrione (99.0%), 2.4-9.5 pounds of sodium dichloro-s-triazinetrione (99.0%), or 2.7-10.7 pounds of sodium dichloro-s-triazinetrione dihydrate (99.0%) for each gallon of BROMIDE PLUS.

**Subsequent Dose:** When microbial control is evident, add sufficient BROMIDE PLUS and oxidant to maintain the "active" residual bromine level ~~0.5-6.0~~ <sup>0.5-5.0 ppm</sup> measured about 5 minutes after treatment. Continue as in initial dose.

(Directions for Use continue in right-hand column)

**PROMIDE PLUS**

A DISINFECTANT, SANITIZER, BACTERICIDE, SLIMICIDE, AND ALGICIDE FOR TREATING RECIRCULATING COOLING WATER SYSTEMS AND ONCE-THROUGH COOLING WATER SYSTEMS, PULP AND PAPER MILLS, AND WASTEWATER TREATMENT SYSTEMS

ACTIVE INGREDIENT: Sodium bromide	40%
INERT INGREDIENTS:	60%
TOTAL:	100%

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**STATEMENT OF PRACTICAL TREATMENT (First Aid)**

- If in eyes:** Flush eyes immediately with plenty of water for at least 15 minutes and get medical attention if irritation persists.
- If on skin:** Wash with plenty of soap and water. Get medical attention.
- If inhaled:** Remove person to fresh air immediately. Get medical attention at once.
- If swallowed:** Call physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person.

See side panels for additional precautionary statements.

EPA Reg. No. 8622-49

EPA Est. No. \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_ LBS.

**AMERIBROM, INC.**  
**52 VANDERBILT AVENUE**  
**NEW YORK, NEW YORK 10017**  
**(212) 286-4000**

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

FEB 11 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.  
8622-49

**WARRANTY**

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with label directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller and Buyer assumes the risk of any such use.

**DO NOT SHIP WITH FOODS, FEEDS, DRUGS, OR CLOTHING**  
**KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE**

**DIRECTIONS FOR USE (cont'd)**

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

**ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS**

Used for the control of algal, bacterial, and fungal slimes in once-through and closed-cycle fresh and seawater cooling systems. Apply BROMIDE PLUS and oxidant to the system inlet water or before any other contaminated area in the system.

**Dosage Rates (Initial and Subsequent)**

Same as for Industrial Recirculating Cooling Water Systems (lower left column).

**PULP AND PAPER MILLS**

Used for the control of algal, bacterial, and fungal slimes, in pulp and paper mill fresh and sea water influent systems, cooling water systems, wastewater treatment systems, nonpotable water systems and other process water. Apply BROMIDE PLUS with oxidant as directed.

**Dosage Rates (Initial and Subsequent)**

Same as for Industrial Recirculating Cooling Water Systems (lower left column).

**WASTEWATER**

BROMIDE PLUS, when used as directed, will disinfect wastewater effectively. The amount of sodium bromide required is determined by the degree of fouling. BROMIDE PLUS can be added to one or several locations of the wastewater system. If its construction permits, it is often added at the influent of the final clarifier or at the point in the system where a secondary treatment is given, prior to effluent discharge.

BROMIDE PLUS and an oxidant should be added in quantities sufficient to reach residual bromine levels of 0.3-1.0 ppm measured about 5 minutes after treatment. A 0.08-2.0 mole ratio is recommended. Typically, the recommended mole ratio may be achieved by using 0.2-6.0 pounds of chlorine gas (99.9%), 0.2-5.2 gallons of NaOCl (12.5%), 0.3-6.7 pounds of trichloro-s-triazinetrione (99.0%), 0.4-9.5 pounds of sodium dichloro-s-triazinetrione (99.0%), or 0.4-10.7 pounds of sodium dichloro-s-triazinetrione dihydrate (99.0%) for each gallon of BROMIDE PLUS. The treatment with BROMIDE PLUS can be evaluated by determining whether the total number of coliform bacteria and/or fecal coliform bacteria (using the MPN procedure) has been reduced to a level permitted by governing regulations.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal

**STORAGE**

Store in a cool, well-ventilated area, in well-closed original containers

**PESTICIDE DISPOSAL**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or residue is a violation of Federal law. If these wastes cannot be disposed of by use in accordance with label instructions, contact your Regional Office of the EPA for guidance.

**METAL CONTAINERS**

Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**PLASTIC CONTAINERS**

Triple rinse (or equivalent). Then offer for reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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