

PH 82 8622-20
BIOBROM C-103L Label
Enhanced Oil Recovery Amendment (Non-Marine Uses)
March 28, 1991

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

DANGER

**CORROSIVE
CAUSES SEVERE BURNS OF EYES
EYE CONTACT MAY CAUSE LOSS OF VISION
IRRITATING TO NOSE AND THROAT
MAY BURN THE SKIN
MAY BE FATAL IF SWALLOWED**

**Do Not Breathe Mist or Vapor
Do Not Get in Eyes, on Skin, or on Clothing
Impact-Resistant Goggles with Side-Shields, or Face Shield
and Rubber Gloves Must Be Worn When Handling
Use with Adequate Ventilation**

ENVIRONMENTAL HAZARD

This product is toxic to fish. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment or disposal of wastes.

NOTE: Do not discharge into lakes, streams, ponds, or public waters unless in accordance with an NPDES permit. For guidance, contact your regional office of the EPA.

CHEMICAL AND PHYSICAL HAZARDS

Reaction with strong reducing agents may be explosive. Avoid misting.

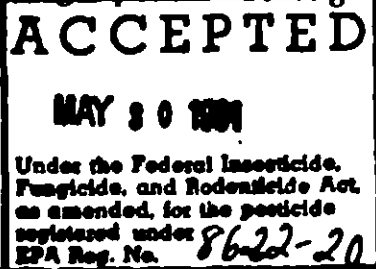
DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

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

STORAGE: Store in dark, cool, dry, well-ventilated area, not above 40°C in well-closed original containers away from energy sources, combustible organic materials, oxidizers, and moisture. When handling or dealing with spills, use impact-resistant goggles with side-shields or face shield, wear body-covering clothes including impervious rubber gloves and boots; use a respirator if misting occurs.



BIOBROM C-103L Label

2

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March 28, 1991

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or 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.

SPILLS: Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and disposing as described for pesticide disposal. If drum contents are contaminated or decomposing, isolate unsealed drum in the open or in a well-ventilated area; flood with 10% sodium bicarbonate solution and large volumes of water if necessary.

IN CASE OF EMERGENCY CONTACT:

CHEMTREC (800) 424-9300

OR

**AMERIBROM, INC.
52 VANDERBILT AVENUE
NEW YORK, NY 10017**

CALL COLLECT: (212) 286-4000

BIOBROM C-103L Label
Enhanced Oil Recovery Amendment (Non-Marine Uses)
March 28, 1991

3

**BIOBROM C-103L
DBNPA**

**A MICROBIOCIDAL BACTERICIDE, FUNGICIDE, ALGICIDE AND SLIMICIDE, IN TREATING
RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS AND FOR PAPER
MILLS AND NON-MARINE USES IN ENHANCED OIL RECOVERY SYSTEMS**

ACTIVE INGREDIENT: 2,2-Dibromo-3-nitrilopropionamide	20%
INERT INGREDIENTS:	80%
	TOTAL 100%

10 LBS BIOBROM C-103L LIQUID PER GALLON

KEEP OUT OF REACH OF CHILDREN

DANGER

STATEMENT OF PRACTICAL TREATMENT

- If in eyes:** Flush eyes immediately with plenty of water for at least 15 minutes and get medical attention at once.
- If on skin:** Wash with soap and plenty of water. Wash contaminated clothing before reuse.
- If swallowed:** Induce vomiting immediately by giving two glasses of water and sticking finger down throat. Repeat until vomit is clear. Call a physician. Never give anything by mouth to an unconscious person.

WASH THOROUGHLY AFTER HANDLING

See side panels for additional precautionary statements

EPA Reg. No 8622-20

EPA Est. No. 15298-IS-1
EPA Est. No. 36303-NJ-1

Manufactured by
BROMINE COMPOUNDS LTD.
P.O. Box 180, Beer-Sheva 84101
ISRAEL

for
AMERIBROM, INC.
52 Vanderbilt Avenue
New York, NY 10017

BIOBROM C-103L Label
Enhanced Oil Recovery Amendment (Non-Marine Uses)
March 28, 1991

4

DIRECTIONS FOR TREATING INDUSTRIAL RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS

NOTE: Add BIOBROM C-103L separately to the system. Do not mix it with other additives so as to avoid decomposition of BIOBROM C-103L due to the high pH of many additive formulations.

Add BIOBROM C-103L to the basin (or any other point of uniform mixing). Addition should be made via a metering pump; it may be continuous or intermittent depending on the severity of the contamination when treatment is begun and the in-system retention time. Optimum performance with this product is achieved by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hrs.

FOR CONTROL OF BACTERIA

Add 0.00095-0.0095 gal. of BIOBROM C-103L/1000 gal. of water in the system depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add 0.0048-0.0095 gal. of BIOBROM C-103L/1000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.0024-0.0095 gal. of BIOBROM C-103L/1000 gal. of water in the system every 4 days or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, add 0.0048-0.0095 gal. of BIOBROM C-103L/1000 gal. of water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.00095-0.0048 gal. of BIOBROM C-103L/1000 gal. of water in the system lost by blowdown.

Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add 0.029-0.095 gal. of BIOBROM C-103L/1000 gal. of water in the system, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add 0.048-0.095 gal. of BIOBROM C-103L/1000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.029-0.095 gal. of BIOBROM C-103L/1000 gal. of water in the system daily or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

~~**Initial Dose:** When the system is noticeably fouled, add 0.048-0.095 gal. of BIOBROM C-103L/1000 gal. of water in the system.~~

March 28, 1991

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal. of BIOBROM C-103L/1000 gal. of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

DIRECTIONS FOR TREATING PULP AND PAPER MILL SYSTEMS

NOTE: Add BIOBROM C-103L separately to the system. Do not mix it with other additives so as to avoid decomposition of BIOBROM C-103L due to the high pH of many additive formulations.

For the control of bacterial, fungal, and yeast growth in pulp, paper and paperboard mills, add BIOBROM C-103L at levels of 0.15-0.50 lb./ton (dry) of pulp or paper produced (i.e., 75 g/1000 kg and 250 g/1000 kg, respectively).

Addition can be continuous or intermittent depending upon the type of system and the severity of contamination. Addition is via a metering pump at a point in the system that will ensure uniform distribution of BIOBROM C-103L in the mass of fiber and water such as the beaters, jordan inlet or discharge, broke chests, furnish chests, save-alls, and white-water tanks.

Heavily fouled systems must first be boiled out, then treated with 0.15-0.35 lb. of BIOBROM C-103L/ton (dry) of paper or pulp as necessary for control.

Moderately fouled systems should be treated continuously with 0.35-0.50 lb. of BIOBROM C-103L/ton (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.15-0.35 lb. of BIOBROM C-103L/ton (dry) of paper on a continuous or intermittent basis as needed for control. Dislodged slime may cause breaks in the paper and clean-up of the paper machine may be advisable.

Slightly fouled systems should be treated continuously with 0.15-0.35 lb. of BIOBROM C-103L/ton (dry) of paper or pulp until the slime is controlled, then added on an intermittent basis to maintain control.

DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS (NON-MARINE USES)

NOTE: Add BIOBROM C-103L separately to the system. Do not mix it with other additives so as to avoid decomposition of BIOBROM C-103L due to the high pH of many additive formulations.

For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts, and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, add 1-80 ppm BIOBROM C-103L (0.1-6.4 gal. of BIOBROM C-103L per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

Continuous Feed Method

When the system is noticeably fouled, add 10-80 ppm BIOBROM C-103L (0.8-6.4 gal. of BIOBROM C-103L per 2400 barrels of water) continuously until the desired degree of control is achieved.

~~Thereafter~~ Subsequently, treat with 1-15 ppm BIOBROM C-103L (0.1-1.2 gal. of BIOBROM C-103L per 2400 barrels of water) continuously or as needed to maintain control.

676

BIOBROM C-103L Label
Enhanced Oil Recovery Amendment (Non-Marine Uses)
March 28, 1991

Intermittent or Slug Method

When the system is noticeably fouled or to maintain control of the system, add 10-80 ppm BIOBROM C-103L (0.8-6.4 gal. of BIOBROM C-103L per 2400 barrels of water) intermittently for 4-8 hours per day and from 1-4 times per week, or as needed depending on the severity of contamination.

Addition of BIOBROM C-103L may be made at the free water knockouts, before or after the injection pumps and injection well headers

NOTE: For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operations, add 15-80 ppm BIOBROM C-103L (1.2-6.4 gal. of BIOBROM C-103L per 2400 barrels of water). Additions of BIOBROM C-103L should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

DO NOT SHIP WITH FOOD, FEEDS, DRUGS OR CLOTHING.

KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

TO MAINTAIN PRODUCT QUALITY, STORE IN THE DARK AT TEMPERATURES BELOW 40°C.

Net contents: ____ LBS/____ KG

WARRANTY

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with 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.