

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO.	DATE OF ISSUANCE
	5785-79	24 SEP 1988
	TERM OF ISSUANCE	24 OCT 1988
NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)		NAME OF PESTICIDE PRODUCT Liquibrom 4300

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Great Lakes Chemical Corporation
 P.O. Box 2200
 West Lafayette, IN 47906

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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 section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 5785-79" to your label before you release the product for shipment.
3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 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.

Jeff Kempter
 Jeff Kempter
 Product Manager (32)

Antimicrobial Program Branch
 Registration Division (75-767)

Enclosures

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL	DATE
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Pringle 10/20

CENTER PANEL

LIQUIBROM 4300

FOR USE AS A DISINFECTANT, SANITIZER, BACTERICIDE, SLIMICIDE, AND ALGICIDE IN RECIRCULATING COOLING WATER SYSTEMS AND ONCE THROUGH COOLING WATER AND WASTEWATER TREATMENT SYSTEMS

Active Ingredient:

Sodium bromide..... 42.8%

Inert Ingredients..... 57.2%
100%

ACCEPTED
with COMMENTS
in EPA Letter Dated:

OCT 24 1988

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

5785-79

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

Eye Contact: Flush eyes with cold water for at least 15 minutes. If irritation persists, seek medical attention immediately.

Skin Contact: Prolonged contact can produce skin irritation. If skin contact occurs, wash with cold water for 15 minutes.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON SIDE PANEL

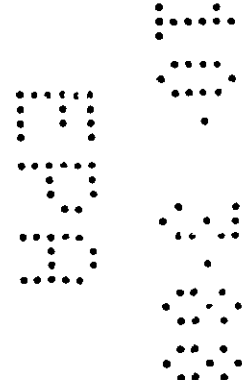
NET WEIGHT: _____

EPA REG. NO. _____

LOT NUMBER: _____

EPA EST. NO. _____

GREAT LAKES CHEMICAL CORPORATION
WEST LAFAYETTE, IN 47906



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.

ENVIRONMENTAL HAZARDS. Do not discharge into lakes, streams, ponds or public water unless in accordance with an NPDES permit. For guidance, contact your regional office of EPA.

PHYSICAL AND CHEMICAL HAZARDS. LIQUIBROM 4300 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.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

STORAGE. Keep product in tightly closed original container when not in use. Store in a 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. 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.

RECIRCULATING COOLING WATER SYSTEMS. When used as directed, LIQUIBROM 4300 effectively controls algae, bacterial, and fungal slimes in commercial and industrial cooling towers; influent water systems such as flow through filters; heat exchange water systems; and industrial water scrubbing systems.

DOSAGE RATES. Add LIQUIBROM 4300 to the system at a 0.5 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 7.2 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution;
- 2) 1.4 to 5.8 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution

Initial Dose: When the system is noticeably fouled, add 0.001 to 0.022 gallons of LIQUIBROM 4300 solution per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.042 lbs. 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 0.0006 to 0.022 gallons of LIQUIBROM 4300 solution per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.004 to 0.042 lbs. 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).

ONCE-THROUGH COOLING WATER AND WASTEWATER TREATMENT SYSTEMS. When used as directed, LIQUIBROM 4300 effectively controls algae, bacterial and fungal slimes in once-through fresh and sea water cooling systems and disinfects secondary and tertiary wastewater treatment systems.

DOSAGE RATES. Add LIQUIBROM 4300 solution to the system at a 0.5 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.8 to 7.2 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution;
- 2) 1.4 to 5.8 gallons sodium hypochlorite (12.5% available chlorine) per gallon of sodium bromide solution.

Initial Dose. When the system is noticeably fouled, add 0.003 to 0.044 gallons of LIQUIBROM 4300 per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.02 to 0.08 lbs. gas chlorine per 1000 gallons contained volume), or sodium hypochlorite solution (0.02 to 0.07 gallons 12.5% sodium hypochlorite solution per 1000 gallons contained volume).

Subsequent Dose. When microbial control is evident, add 0.001 to 0.044 gallons LIQUIBROM 4300 solution per 1000 gallons of water contained in the system, and oxidize with either gas chlorine (0.008 to 0.08 lbs. gas chlorine per 1000 gallons contained volume), or sodium hypochlorite solution (0.006 to 0.07 gallons 12.5% sodium hypochlorite solution per 1000 gallons contained volume). :.....

Feed LIQUIBROM 4300 either before or after the oxidant injection point into the water to be treated. Be sure rapid mixing of the treated water, LIQUIBROM 4300 and oxidant is achieved. Pump manufacturers can recommend the appropriate materials of construction and capacity for a pump to feed LIQUIBROM 4300 or sodium hypochlorite solution. If used as the oxidant, chlorine gas must be handled and used only in accordance with practices recommended in The Chlorine Manual published by the Chlorine Institute, Inc., New York. Use chlorine gas only in well ventilated areas. :.....

Treatment levels of LIQUIBROM 4300 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.

LiquiBrom 4300 weighs 12.2 lbs/gal at 70° F.

NOTE: Seller warrants that this product complies with the specifications expressed in this label. Seller makes no other warranties; and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. Seller's liability for default, breach, or failure under this label shall be limited to the amount of the purchase price. Seller shall have no liability for consequential damages.

