

5785-68

- PM 32

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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

DATE OF ISSUANCE

5785-68

10-6-87

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

Bromine Chloride

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Great Lakes Chemical Corporation
P.O. BOX 220
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)(C), provided that you

1. Submit the following studies by the dates shown. If they are not submitted on time, this Registration Notice will be cancelled unless a time extension is granted.

Guideline No.	Study	Test Substance	Deadline
72-1	96 hr. LC50 for rainbow trout or bluegill	Hypobromous acid	6/30/88
72-2	48 hr. IC50 for aquatic invertebrate	" "	6/30/88
72-3	96 hr. LC50 for sheepshead minnow and shrimp	" "	6/30/88
72-3	96 hr. embryo larvae or 48 hr shell deposition for American oyster	" "	6/30/88
72-7	Residue monitoring for freshwater and estuarine environments during once through cooling water use	" "	3/30/89
62-1	Preliminary analysis of ingredients (samples from five batches and spectral data which will confirm the presence of bromine species must be submitted)		6/30/88

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

BEST AVAILABLE COPY

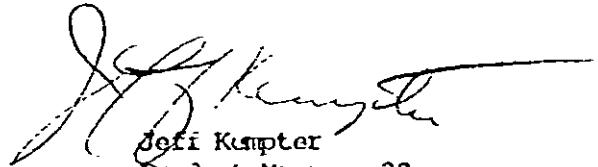
Guideline No.	Study	Test Substance	Deadline
63-17	One year storage and stability	Technical	9/30/89

2. Add the phrase "EPA Registration No. 5785-68" to the label before you release the product for shipment.

3. Submit five (5) copies of your finished printed labeling before you release the product for shipment.

4. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar data to submit such data.

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
 Product Manager 32
 Disinfectants Branch
 Registration Division

Enclosure

CONCURRENCES

SYMBOL	TS-767C	TS-767C	TS-767C				
SURNAME	Kempter	Campbell	Alleva				
DATE	8/21/87	7-22-87	9/22/87				

CENTER PANEL

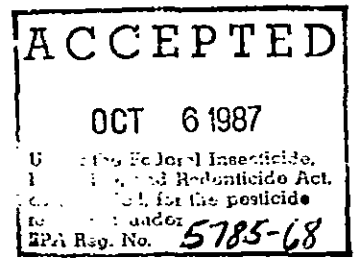
D R A F T

BROMINE CHLORIDE

Manufacturing Use Product for repackaging and reformulating and for use as a disinfectant, algicide, bactericide and/or slimicide for wastewater, commercial and industrial recirculating cooling water systems and industrial once through cooling water systems.

ACTIVE INGREDIENT:

Bromine Chloride..... 99.5%
Inert Ingredients..... 0.5%
100.0%



KEEP OUT OF REACH OF CHILDREN

CROSSBONES, SIGNAL WORDS, & CHILD HAZARD STATEMENT IN RED



DANGER POISON



Type sizes will be 18 pt. for DANGER; 8.5 pt. for CHILD HAZARD STATEMENT & POISON

STATEMENT OF PRACTICAL TREATMENT

If Inhaled: Remove victim to fresh air immediately. If breathing has stopped, administer artificial respiration. Call a physician immediately.

Skin Contact: Remove all contaminated clothing and shoes at once. Flush skin with flowing water for at least 30 minutes. Excessive skin contact may produce burns. Wash clothing before reuse and destroy contaminated shoes. Seek medical attention immediately.

Eye Contact: Irrigate with large amounts of running water for at least 30 minutes, hold eyelids apart. Obtain medical attention immediately.

If Swallowed: Corrosive. Do not induce vomiting. Give large amounts of water and seek medical attention immediately.

See Additional Precautionary Statements on Side Panel

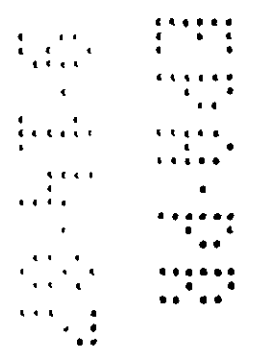
Net Weight _____

EPA Reg. No. 5785-_____

Lot No. _____

EPA Est. No. 5785-AR-01

GREAT LAKES CHEMICAL CORPORATION
PO BOX 2200, West Lafayette, Indiana 47906



For use as a disinfectant, algicide, fungicide, bactericide and/or slimicide for wastewater, commercial and industrial recirculating cooling water systems and industrial once through cooling water systems.

PRIMARY, SECONDARY AND TERTIARY WASTE WATER EFFLUENT

Bromine chloride is applied with the appropriate injection equipment to the waste water stream at a rate of up to 1.7 lb per 10,000 gallons of treated water. Adjust the application rate until a 1 to 3 mg/L residual (as chlorine) is measured at a point a minimum of one minute flow time downstream from the bromine chloride injection point. The feed rate of the bromine chloride must satisfy the demand of the waste water, provide the desired degree of disinfection, and produce a residual oxidant in the treatment plant discharge which does not exceed the applicable NPDES permit for the location.

ONCE THROUGH COOLING WATER

Bromine chloride is applied with the appropriate injection equipment to the cooling water at a rate of up to 0.85 lb per 10,000 gallons of treated water for up to two hours per day per condenser. Adjust the application rate until a 1 to 3 mg/L residual (as chlorine) is measured just prior to the most sensitive equipment in the system for at least four hours. The feed rate of the bromine chloride must satisfy the demand of the cooling water, provide the desired protection of sensitive equipment, and produce a residual in the cooling system discharge which does not exceed the applicable NPDES permit for the location.

RECIRCULATING COOLING WATER SYSTEMS

Bromine chloride is applied with the appropriate injection equipment to the cooling water at a rate of up to 1.7 lb. per 10,000 gallons of water treated. Adjust the application rate until 1 to 3 mg/L residual (as chlorine) is measured just prior to the most sensitive equipment in the system for at least four hours. The feed rate of the bromine chloride must satisfy the demand of the cooling water, provide the desired level of biological control, and produce a residual oxidant in the treatment plant discharge which does not exceed the applicable NPDES permit for the location.

NOTE: Seller warrants that this product complies with the specifications expressed in this label. Seller makes no other warranties; and disclaims all other warranties, expressed 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.

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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
AND DOMESTIC ANIMALS
DANGER

HAZARDOUS LIQUID AND VAPOR UNDER PRESSURE. INHALATION MAY BE FATAL.
CORROSIVE . Causes eye and skin damage. Liquid will produce severe burns to skin and eyes. Vapor may cause severe irritation and burns to skin and eyes. Respiratory failure may occur. Exposure to high vapor concentrations may produce delayed pulmonary edema and pneumonia. Wear goggles or face shield and rubber or neoprene gloves when handling. Protective clothing consisting of a rubber or neoprene suit and rubber boots should be worn. Wear self-contained breathing apparatus in the presence of a heavy vapor concentration (above 5 ppm as chlorine). Use a full-face piece chemical cartridge or canister respirator approved by NIOSH for chlorine/acid gas up to 5 ppm as chlorine.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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

Strong oxidizer. Reacts vigorously with organic and combustible materials. Use clean, dry equipment. Mix only with water. Do not mix with other chemicals. Incompatible with alkalis, reducing agents and reactive metals such as aluminum, titanium, and magnesium. In case of spills or leaks, use a self-contained breathing apparatus. Use lime slurry or dry soda ash to neutralize spills. Vapor releases should be controlled with water fog if possible. Cylinders of anhydrous ammonia should be available for decontamination of atmosphere containing Bromine Chloride fumes.

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: Store in original container in a cool, dry, well ventilated area away from occupied structures. Store away from heat, open flames and other chemicals. All storage containers must have a weather resistant label attached near the outlet valve and must not be accessible to the general public. Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Return empty containers to the Great Lakes Chemical Corporation location from which shipment was made. Close valve by turning until hand tight. Disconnect lines. Replace safety cap and/or bonnet. Return partially filled cylinders only after consulting Great Lakes Chemical Corporation for proper shipping instructions.