

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 19, 2015

J. Michael Kelley, Ph.D. Authorized Representative for Great Lakes Chemical Corporation P.O. Box 2200 West Lafayette, IN 47906

Subject: Label Amendment – To correct typographical errors, update per PR Notices and

precautionary statements.

Product Name: Liquibrom 4300 EPA Registration Number: 5785-79 Application Date: March 27, 2015

Decision Number: 503028

Dear Dr. Kelley:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Wanda Henson by phone at (703) 308-6345 or via email at henson.wanda@epa.gov

Sincerely,

Demson Fuller, Product Manager 32 Regulatory Management Branch II Antimicrobials Division (7510P) Office of Pesticide Programs

Enclosure

{All text in brackets [xxx] is optional and may or may not be included on a final label.} *{All text in braces {xxx} is administrative and will not appear on a final label.}*

LIQUIBROMTM 4300

[For use as a Disinfectant, Sanitizer, Bactericide, Slimicide, Algicide, and Mollusk Control Agent, and for Control of Microbial Slimes in: Recirculating Cooling Water Systems, Industrial Process Water, Once-Through Cooling Water Systems, Wastewater Treatment Systems, Brewery Pasteurizers, Drip Irrigation Systems, and Pulp and Paper Mill Water.]

ACTIVE INGREDIENT: Sodium bromide OTHER INGREDIENTS:

42.8% 57.2% 100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

ACCEPTED

06/19/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5785-79

FIRST AID:

TOTAL:

IF IN EYES: - Hold eye open and rinse slowly and gently with water for 15-20 minutes.

- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

- Call a poison control center or doctor for treatment advice.

IF ON SKIN OR

- Take off contaminated clothing.

CLOTHING:

- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

- Call poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. [IN CASE OF MEDICAL EMERGENCY, CALL 1-800-949-5167]

SEE OTHER PRECAUTIONS ON SIDE PANEL

Net Weight ____ EPA Reg. No. 5785-79 Lot No. ____ EPA Est. No. 5785-AR-2

> GREAT LAKES CHEMICAL CORPORATION P.O. Box 2200 West Lafayette, IN 47906

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.

RECIRCULATING COOLING WATER SYSTEMS, INCLUDING INDUSTRIAL PROCESS WATER, AIR WASHERS AND BREWERY PASTEURIZERS:

When used in conjunction with an oxidant, this product effectively controls algal and bacterial 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; influent water systems such as flow-through filters, cooling ponds, canals, and lagoons, heat exchange water systems, industrial process water, air washers, pasteurizers, retort systems, and industrial water scrubbing systems.

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

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Initial Dose: When the system is noticeably fouled, add 0.0003 to 0.022 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.042 pounds 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 0.00014 to 0.022 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.004 to 0.044 pounds 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 WASTE WATER TREATMENT SYSTEMS:

When used in conjunction with an oxidant, this product effectively controls algal and bacterial slime, and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in oncethrough fresh and sea water cooling systems, cooling ponds, canals, and lagoons; and secondary and tertiary wastewater treatment systems.

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

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Initial Dose: When the system is noticeably fouled, add 0.0007 to 0.044 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.02 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.02 to 0.07 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

Subsequent Dose: When microbial control is evident, add 0.0003 to 0.044 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.006 to 0.07 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

DRIP IRRIGATION SYSTEMS:

For the control of algal and microbial slimes in drip irrigation distribution lines, preventing plugging and allowing uniform distribution of water.

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

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.4 to 23.2 gallons of sodium hypochlorite (12.5% available chlorine) 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 0.2 to 5 ppm as needed to maintain control of the system. For 0.2 ppm bromine add 0.000206 gallons of this product mixed with 0.0016 gallons 12.5% bleach or 0.00168 lbs. gas chlorine per 1,000 gallons water treated. This product can be added whenever chlorination is applied.

MEASUREMENT OF BROMINE RESIDUALS. Treatment levels of this product can be measured with a test kit. Bromine residuals should be measured in water taken from the treated system while it is running. Tests should be made immediately after drawing water samples at the emitter farthest from the injection pump.

PULP AND PAPER MILLS:

When used in conjunction with an oxidant, this product effectively controls algal and bacterial 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, non-potable water systems, and other process water.

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

- 1) 1.8 to 29.0 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.4 to 23.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Add sufficient amount of mixed product/oxidant solution to achieve a residual bromine level of 0.5 to 5.0 parts per million. For 0.5 parts per million add 0.00051 gallons of product and 0.0018 gallons of (12.5%) bleach or 0.0019 pounds gas chlorine per 1,000 gallons of water treated.

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 parts per million 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.

This product weighs 12.2 pounds/gallon at 70° F.

STORAGE AND DISPOSAL: Do not contaminate water, food, or feed by storage and disposal.

PRODUCT 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.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

{Text for non-refillable containers}

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

{For containers of 5 gallons or less.} [Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.] {For containers with capacities greater than 5 gallons.} [Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.] {Text for refillable containers}

CONTAINER DISPOSAL: Refillable container. Refill this container with sodium bromide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash 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: This pesticide is toxic to fish and aquatic organisms. 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.

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.