

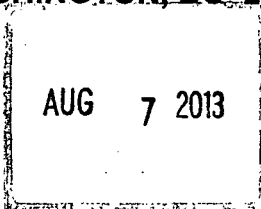
8622-49

8/7/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Levi Howell  
Regulatory Affairs Specialist  
ICL-IP America, Inc.  
95 MacCorkle Avenue S. W.  
South Charleston, WV 25303

Subject: **BROMIDE® PLUS**  
EPA Registration Number: 8622-49  
Application Date: May 3, 2013  
EPA Receipt Date: May 7, 2013

Dear Mr. Howell:

The following amendment, submitted in connection with registration under section of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Label Amendment:

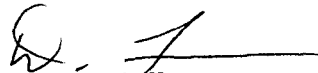
- Revised Labeling (See letter dated May 3, 2013).

General Comments:

A copy of the stamped label is enclosed for your record.

Should you have any questions or comments concerning this letter, please contact Adam Heyward via email at: [heyward.adam@epa.gov](mailto:heyward.adam@epa.gov) or by telephone at (703) 347-0274 during the hours of 6:00 am to 2:30 pm EST.

Sincerely,

  
Demson Fuller  
Acting Product Manager (32)  
Regulatory Management Branch II  
Antimicrobials Division (7510P)

*Enclosure: Stamped label*

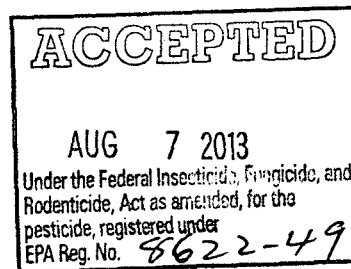
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{8622-49}

{BROMIDE PLUS® Master Label Ver.12}

{DOA: 08022013}

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



# [BROMIDE PLUS®]

{Alternate brand names approved by the EPA.}

[AZURE® Deluxe Algae Controller]

[Crystal® Blue]

[A [DISINFECTANT], [SANITIZER], [BACTERICIDE], [SLIMICIDE], [ALGAECIDE], [AND] [MOLLUSK CONTROL AGENT] [FOR TREATING] [RECIRCULATING COOLING WATER SYSTEMS] [AND] [ONCE-THROUGH COOLING WATER SYSTEMS], [PULP AND PAPER MILLS], [WASTEWATER TREATMENT SYSTEMS], [AIR WASHERS], [AND] [BREWERY PASTEURIZERS].]

[FOR USE [TO CONTROL AND PREVENT ALGAE GROWTH] [AND] [TO MAINTAIN CLEAR WATER] IN [SWIMMING POOLS] [AND] [SPAS & HOT TUBS].]

**ACTIVE INGREDIENT:**

Sodium Bromide ..... 40%

**OTHER INGREDIENTS:** ..... 60%

**TOTAL:** ..... 100%

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

FIRST AID	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center, or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p><b>YOU MAY ALSO CONTACT [1-800-420-9236] FOR EMERGENCY MEDICAL TREATMENT INFORMATION.</b></p>	
<p><b>NOTE TO PHYSICIAN</b></p> <p>Probable mucosal damage may contraindicate the use of gastric lavage.</p>	

See [back] [side] panel[s] for additional precautionary statements [and first aid].

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

**HARMFUL IF SWALLOWED. HARMFUL IF ABSORBED THROUGH SKIN. AVOID CONTACT WITH EYES, SKIN OR CLOTHING.**

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**GENERAL PRECAUTIONS AND RESTRICTIONS**

Do not smoke, drink, or eat when handling. Do not ship with foods, feeds, drugs, or clothing. Keep container tightly closed when not in use.

**ENVIRONMENTAL HAZARDS**

{For containers having a capacity less than 50 lbs.}  
[This product is toxic to fish and aquatic organisms.]  
{For containers having a capacity greater than or equal to 50 lbs.}  
[This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of waste. 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.]

**PHYSICAL OR CHEMICAL HAZARDS**

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

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read the entire label and use strictly in accordance with precautionary statements and directions.

{The following DIRECTIONS OF USE are for industrial use applications only.}

[This product 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. This product may be added to the system inlet water or metered into the existing sodium hypochlorite piping to form a solution of sodium hypobromite. This product 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 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, heat exchange water towers, industrial water scrubbing systems, and influent systems such as flow-through filters, lagoons, etc.]

**[Dosage Rates:]{These rates apply to Once-Through Cooling Water Systems and Pulp and Paper Mills as well.}**

**[Initial Dose:** When noticeably fouled, add sufficient amount of this product 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 this product.]  
[Subsequent Dose: When microbial control is evident, add sufficient of this product and oxidant to maintain the active residual bromine level (0.5 - 5.0 ppm), measured about 5 minutes after treatment. Continue as in initial dose.]]

#### [ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS

Used for the control of algal, bacterial, and fungal slimes and controls the settlement and growth of mollusks such as the Zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in once-through and closed-cycle fresh and seawater cooling systems. Apply this product and oxidant to the system inlet water or before any other contaminated area in the system.

[Dosage Rates:] [Initial and Subsequent rates are the same as for Industrial Recirculating Cooling Water Systems.]

#### [PULP AND PAPER MILLS

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

[Dosage Rates:] [Initial and Subsequent rates are the same as for Industrial Recirculating Cooling Water Systems.]

#### [WASTEWATER

This product, when used as directed, will disinfect wastewater effectively. The amount of sodium bromide required is determined by the degree of fouling. This product 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. This product and an oxidant must 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 this product. The treatment with this product can be evaluated by determining whether the total number of coliform bacteria and/or fecal coliform bacteria (using the Most Probable Number procedure) has been reduced to a level permitted by governing regulations.]

#### [AIR WASHERS AND BREWERY PASTEURIZERS:

When used in conjunction with an oxidant, this product effectively controls algal, bacterial, and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in influent water systems such as flow through filters, cooling ponds, canals, and lagoons; heat exchange water systems; air washers; pasteurizers; retort systems; and industrial water scrubbing systems.

#### DOSAGE RATES:

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

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of this product; or,
- 2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of this product.

**Initial Dose:** When the system is noticeably fouled, add 0.0003 to 0.024 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.040 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.007 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water.)

**Subsequent Dose:** When microbial control is evident, add 0.0002 to 0.024 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.004 to 0.040 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.003 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of water.)

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**[FRUIT AND VEGETABLE WASH**

When used in conjunction with an oxidant (Chlorine gas or NaOCl), this product can be used for the wash and transport of fruits and vegetables. This product and oxidant must be added at a rate not to exceed a dosage of 55ppm of product (38.5 gallons of this product per one million gallons of water treated). Apply sufficient amount of this product and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 5 ppm when measured approximately 5 minutes after treatment. The recommended activation mix of this product and oxidant is a one to one molar ratio. Chlorine dose (99%) 3.3 pounds, 10% NaOCl dose (3.3 gallons) or 15% NaOCl dose (2.0 gallons) will activate one gallon of this product (40% sodium bromide solution). This product may be continuously metered to Chlorinator eductor water or mixed with a NaOCl solution for activation. The use of this product under this application must be followed by a potable water rinse to remove, to the extent possible, residues of the chemical.]

{The following DIRECTIONS OF USE are for [swimming pools] and [spa & hot tub] uses only.}

{For SWIMMING POOLS only.}

**[SWIMMING POOLS]**

**[WAIT ONE HOUR AFTER APPLICATION BEFORE SWIMMING.]**

{For SWIMMING POOLS using chlorinating disinfection systems.}

[This product is used to control and prevent algae growth and to maintain clear water in swimming pools using chlorinating systems.

**INITIAL TREATMENT:** For pools using chlorinating disinfection systems. Use to start a preventative treatment program with this product. For each 10,000 gal. of swimming pool water, add 6 fl. oz. of this product directly to the water. Follow the Initial Treatment directions on the chlorinating compound product label. Do not mix this product directly with chlorinating compounds.

Size of pool	Amount of product
10,000 gal.	6 oz.
15,000 gal.	9 oz.
20,000 gal.	12 oz.

Wait at least 1 hour after product treatment before entering pool or follow the required waiting period for a product used with this product, if greater than 1 hour.

**MAINTENANCE TREATMENT:** For pools using chlorinating disinfection systems. Use bi-weekly, or as needed to keep water free of algae. Add chlorinating compound as directed on product label for appropriate size of swimming pool. Add the following amount of this product when adding a chlorinating compound.

Amount of chlorinating compounds	Amount of product
1 gal. sodium hypochlorite (liquid chlorinating compound) 10-12%	5 fl. oz.
2 gal. sodium hypochlorite (liquid chlorinating compound) 5.25%	5 fl. oz.
1 lbs. of dry chlorinating compound (calcium hypochlorite or dichloroisocyanurate)	5 fl. oz.
2 lbs. lithium hypochlorite (35%)	5 fl. oz.
Two 3" tablets trichloro-s-triazinetrione	6 fl. oz.
1 lbs. chlorine produced by chlorine generator	5 fl. oz.

Wait at least 1 hour after product treatment before entering pool or follow the required waiting period for a product used with this product if greater than 1 hour.]

{For non-chlorine SWIMMING POOLS using biguanide, baquacil, or softswim systems.}

[This product is used to control and prevent algae growth and to maintain clear water in swimming pools using Biguanide, Baquacil, or Softswim systems.

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**INITIAL TREATMENT:** For pools using Biguanide, Baquacil, or Softswim systems. Use to start a preventative treatment program with this product. For each 10,000 gal. of swimming pool water, add 6 fl. oz. of this product directly to the water. Follow the Initial Treatment directions on the hydrogen peroxide product label. Do not mix this product directly with hydrogen peroxide.

Size of pool	Amount of product
10,000 gal.	6 oz.
15,000 gal.	9 oz.
20,000 gal.	12 oz.

Wait at least 1 hour after product treatment before entering pool or follow the required waiting period for a product used with this product if greater than 1 hour.

**MAINTENANCE TREATMENT:** For pools using Biguanide, Baquacil, or Softswim systems. Use bi-weekly or as needed to keep water free of algae. Add hydrogen peroxide compound as directed on product label for appropriate size of swimming pool. Separately, add 1 fl. oz. of this product for each 4 fl. oz. of hydrogen peroxide.

Amount of hydrogen peroxide added	Amount of product
8 fl. oz.	2 oz.
12 fl. oz.	3 oz.
16 fl. oz.	4 oz.

Wait at least 1 hour after product treatment before entering pool or follow the required waiting period for a product used with this product if greater than 1 hour.]

{For non-chlorine SWIMMING POOLS using potassium monopersulfate.}

[This product is used to control and prevent algae growth and to maintain clear water in swimming pools using potassium monopersulfate as an activator.

**INITIAL TREATMENT:** For pools using potassium monopersulfate to activate this product. Use to start a preventative treatment program with this product. For each 10,000 gal. of water of swimming pool water, add 6 fl. oz. of this product directly to the water. To activate, add 1 lbs. of potassium monopersulfate per 10,000 gal. of water. Wait at least 1 hour after treatment before entering pool or follow the required waiting period for a product used with this product if greater than 1 hour.

**MAINTENANCE TREATMENT:** Use bi-weekly or as needed to keep water free of algae. Separately add 6 oz. of this product and 1 lbs. of potassium monopersulfate per 10,000 gal. of water per week. Wait at least 1 hour after treatment before entering pool or follow the required waiting period for a product used with this product if greater than 1 hour.]

{For winterizing and spring startup treatment of SWIMMING POOLS.}

[Steps for winterizing or spring startup treatments of swimming pools:

- 1.) Add 12 oz. of this product per 10,000 gal. of water.
- 2.) Activate by adding one of the following: 1 lbs. of dry, chlorinating compound (calcium hypochlorite or dichloroisocyanurate), 2 lbs. of lithium hypochlorite (35%), 1 gal. of sodium hypochlorite (liquid chlorinating compound) 10-12%, 2 gal. of sodium hypochlorite (liquid chlorinating compound) 5.25%, or 1 lbs. potassium monopersulfate per 10,000 gal. of water.
- 3.) Allow the pump to circulate the water for several hours after chemical addition for good mixing.

Follow dealer's normal winterizing procedures for your pool. Before using a chlorinating compound or oxygen shock, read the Direction for Use and Precautionary Statements specific to that product. To aid in quicker and easier opening of the pool in the spring, repeat above application upon start-up.]

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{For SPAS & HOT TUBS only.}

**[SPAS & HOT TUBS**

**INITIAL DOSE:** With pump running, add 3.0 oz. of this product per 5,000 gallons of water, or as needed to achieve a bromine residual of 1.0-3.0 ppm when measured with a suitable test kit approximately five minutes after treatment. Maintain pH between 7.4-7.8.

**SUBSEQUENT DOSE:** On a weekly basis, add a sufficient amount of this product to maintain a bromine residual of 1.0-3.0 ppm when measured with a suitable test kit. Maintenance of a bromine residual is dependent on ambient temperature, light intensity, and bather load, and requires frequent checks with a suitable test kit. Maintain pH between 7.4-7.8. When used in conjunction with another product, always follow the label directions on that product. Avoid use of soaps, lotions, or oils which might alter product effectiveness. Drain and clean every six months, or when water becomes difficult to manage.]

**STORAGE AND DISPOSAL**

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

**PESTICIDE 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 rinsate is a violation of Federal law. If these wastes cannot be disposed of by use in accordance with label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING**

{For nonrefillable containers with capacities less than or equal to 5 gallons.}

[Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or 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 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 nonrefillable containers with capacities greater than 5 gallons.}

[Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. 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 rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.]

{For nonrefillable containers – residential/household use only.}

[Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available.]

{For refillable containers only.}

[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.]

**SPILLS**

{For industrial use applications only.}

[When handling or dealing with spills, use goggles with side shields or face shield; and protective clothing, including chemical-resistant gloves and boots. Absorb on sand or vermiculite and place in closed container and dispose of as described for pesticide disposal. If containers are contaminated or decomposing, do not reseal. Isolate unsealed container in the open or a well-ventilated area; flood with large volumes of water if necessary.]

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{8622-49}

{BROMIDE PLUS® Master Label Ver.12}

{DOA: 08022013}

{For [swimming pool] and [spa & hot tub] use applications only.}  
[Small spills may be mopped up, flushed away with water, or absorbed on some absorbent material and incinerated. Securely wrap original container in several layers of newspaper and discard in trash.]

**[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 to the extent consistent with applicable law, neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, expressed 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.]

**Produced for:**

ICL-IP America, Inc.  
95 MacCorkle Avenue S.W.  
South Charleston, WV 25303  
{for DOMESTIC labels only:}[Tel: 1-(800) 811-2327]  
{for INTERNATIONAL labels only:}[Tel: 1-(304) 746-3000]

EPA Reg. No. 8622-49  
EPA Est. No. \_\_\_\_\_  
[Material][Label] No. \_\_\_\_\_  
NET CONTENTS: \_\_\_\_\_ [lbs.][kg.][gal.][fl. oz.]  
[Batch][Lot] No. \_\_\_\_\_

