



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 27, 2018

Levi Howell  
Regulatory Affairs Specialist  
ICL-IP America, INC.  
11636 Huntington Road  
Gallipolis Ferry, WV 25515

Subject: Notification per PRN 98-10 – Label Notification  
Product Name: BROMOTOP 10  
EPA Registration Number: 8622-84  
Application Date: 06/08/2018  
Decision Number: 541913

Dear Mr. Howell:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

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.

If you have any questions, you may contact Jake Farley via email at [Farley.Jake@epa.gov](mailto:Farley.Jake@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Zeno Bain", is located below the "Sincerely," text.

Zeno Bain, Product Manager 33  
Regulatory Management Branch I  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

{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.}

## Bromotop-10

[THIS PRODUCT IS A LIQUID MICROBIOCIDAL FOR USE IN CONTROLLING THE GROWTH OF BACTERIA AND \*ALGAE IN INDUSTRIAL APPLICATIONS.] [THE FOLLOWING APPLICATIONS ARE NOT APPROVED IN THE STATE OF CALIFORNIA:] [INJECTION FLUIDS]; [STARCH], [PIGMENT] [AND] [MINERAL SLURRIES]; [HIDES AND SKINS]; [\*][CONTROL OF ALGAE].

KEEP OUT OF REACH OF CHILDREN

**DANGER**

Active Ingredient:

2-Bromo-2-nitropropane-1,3-diol: ..... 10%

Other Ingredients: ..... 90%

Total: ..... 100%

### NOTIFICATION

8622-84

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/27/2018

### FIRST AID

If in eyes	<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>
If swallowed	<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 a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
If on skin or clothing	<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>
If inhaled	<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 mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. **YOU MAY ALSO CONTACT [Telephone No.] FOR EMERGENCY MEDICAL TREATMENT INFORMATION**

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

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

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### DANGER

**CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, ABSORBED THROUGH THE SKIN, OR INHALED. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. AVOID BREATHING SPRAY MIST. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTION IN SOME INDIVIDUALS. 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.**

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants, socks and chemical resistant footwear, goggles, face shield and chemical-resistant gloves made of material such as nitrile, butyl, or neoprene rubber or barrier laminate.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

*{For end-use products in containers with sizes of less than 50 pounds.}*

[This pesticide is toxic to fish.]

*{For end-use products in containers with sizes of greater than or equal to 50 pounds.}*

[This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans, or public water 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 sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.]

#### PHYSICAL OR CHEMICAL HAZARDS

This product is corrosive to mild steel.

#### 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.

#### [GENERAL USE DIRECTIONS

To control the growth of slime forming, spoilage, odor causing and corrosion inducing bacteria and algae in industrial applications. **Not for control of algae in California.**

This product can be dosed directly by preparing a stock solution immediately prior to application either by open pouring (not cooling water treatment) or by metered pump. For product preservation, this product is best added to any liquid phase as late as possible during the manufacturing process and after any heating stage, or when the product has cooled below 40°C.]

### **[INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS**

To control slime-forming bacteria and algae in industrial recirculation cooling towers and evaporative condensers. This product may be slug-dosed directly into the sump or basin or it may be added by a suitable chemical pump. Where metering pumps are used, these must be set to deliver the required dose as fast as possible (within 1 hour). The dosing point should be located close to the outlet from the basin to ensure rapid dispersal around the system. Do not apply by open pouring of the liquid.

**FREQUENCY AND DOSE:** This product may be shock dosed once or twice weekly as a normal routine. Where contamination is heavy, more frequent dosing may be required. In heavily fouled systems, the tower should be drained and cleaned before treating with this product. This product should be shock-dosed at between 250-1000 ppm (2-8 pt./1,000 gallons) depending on the condition of the tower, the quality of raw water input, and the amount of bleed off.]

### **[PRODUCED WATER**

To inhibit the growth of slime-forming or corrosion-inducing sulfate-reducing bacteria in formation water produced by wells together with oil or gas, inject this product into the water-containing oil or gas stream at any convenient point. It should be injected as slug doses, not continuous feed.

**FREQUENCY AND DOSE:** Depending on the severity and rapidity of contamination, this product should be slug-dosed from once a week to once a month with 0.083-0.33 pt./barrel.]

### **[INDUSTRIAL PROCESS WATER**

Use this product to effectively control bacterial and algal growth in industrial process water, including, closed circuit machine cooling (injection molding, etc.) and stored (non-potable) water, as well as to reduce the biofouling of pipework, heat exchanges, and condenser tubes and to minimize microbially produced corrosion. Dosing should be carried out into the sump/tank of the process water system. Shock-dosing is preferred. This product can also be used as an intermittent flush treatment during regular maintenance cleaning of water tanks (non-potable) or equipment.

**FREQUENCY AND DOSE:** In open systems, shock-dosing should be carried out on a once weekly to once monthly basis, depending on the degree of contamination. In closed circuit systems with little possibility of re-infection or loss of this product because of makeup or dilution, less frequent dosing (once monthly/twice monthly) should be sufficient. Dosing should be carried out to give an initial concentration of 500 ppm of this product (4 pt./1,000 gallons). When the above treatment has been successful, dosing can be lowered to a minimum of 100 ppm of this product (0.8 pt./1,000 gallons). For intermittent treatment during routine maintenance, this product should be used at 1,000 ppm (8 pt./1,000 gallons) and a contact time of at least one hour.]

### **[DRILLING MUDS**

To preserve oil and gas well drilling muds by inhibiting growth of cellulolytic, slime-forming, or sulfate-reducing bacteria. This product may be dosed directly into the mud hopper.

**FREQUENCY AND DOSE:** A single slug dose one to three times each 24 hours. Each slug dose should be 0.18-0.38 pt./barrel total mud volume.]

### **[OIL AND GAS FLUIDS**

For use in both terrestrial and off-shore drilling muds, packer fluids, and brines for the control of contamination and degradation of a wide range of gels and fluids including fracturing, enhanced oil

recovery, injection, well squeeze, drilling, workover and completion fluids. Inhibits growth of cellulolytic, slime-forming or sulfate-reducing bacteria. This product may be dosed directly into the mud or brine.

FREQUENCY AND DOSE: A single slug dose one to three times each 24 hours. Dosing may be less frequent where the contamination is low. Each slug dose should be 0.18-0.36 pt./barrel total mud volume.]

#### **[WATER BOTTOMS IN OIL OR TRANSPORTATION TANKS**

##### **[(not approved for this use in the state of California)]**

This product provides effective control of bacterial contamination in water bottoms and in crude and refined hydrocarbon storage systems. Above and below ground storage tanks and large marine systems are all suitable for treatment. This product may be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon phase and allowed to percolate through.

FREQUENCY AND DOSE: Direct addition to the water phase by injection or percolation should be carried out every 30-60 days depending on the severity of the problem. Addition to the hydrocarbon phase will result in longer term protection by gradual diffusion from the hydrocarbon phase into the water phase (depending on storage conditions). Incorporate this product at a rate which will achieve concentrations of 500-1000 ppm in the aqueous phase. Larger quantities may be added when dosing the hydrocarbon phase to allow diffusion of the active ingredient into the water bottom. ]

#### **[INJECTION FLUIDS [(not approved for this use in the state of California)]**

To control contamination and corrosion from bacterial sources in fluids/waste fluids that are disposed of through injection into an approved well followed approved guidelines, add this product to each volume of fluid prior to injection.

FREQUENCY AND DOSE: This product should be added at a rate of 500-1,000 ppm (0.18-0.36 pt./barrel) based on the water percent of the injection fluid.]

#### **[ENHANCED OIL RECOVER (EOR) FLUIDS**

For effective control of bacterial growth and eliminating degradation of EOR gels and fluids used in the oil and gas industry, add this product during mixing or by injection during the EOR procedure.

FREQUENCY AND DOSE: This product should be added throughout the EOR operation. This product should be added at the rate of 500-1,000 ppm (0.18-0.36 pt./barrel) depending on the quality of the makeup water.]

#### **[WELL SQUEEZE FLUIDS**

For the effective control of aerobic and anaerobic bacteria in squeeze fluids and downhole bore areas, add This product during pre-mixing of the well squeeze or by direct injection at the well head during the well squeeze procedure.

FREQUENCY AND DOSE: This product should be used for each well squeeze operation to ensure best results. Add this product at a rate of 2-16 pt./1,000 gallons, depending on the quality of the makeup water.]

#### **[FRACTURING FLUIDS**

This product reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. Add this product directly to the well phase at any state of the fracturing operation, for example, at the pre-mixing stage or by direct injection at the well head in combined mix/injection procedures.

FREQUENCY AND DOSE: This product should be used for each fracturing operation to ensure best results. Add this product at a rate of 4-8 pt./1,000 gallons, depending on the quality of the makeup water.]

**[OIL FLOODING WATERS/INJECTION WATERS]**

To inhibit the growth of slime-forming or corrosion-inducing sulfate-reducing bacteria in oil and gas well injection and formation waters, inject this product as a slug dose at any convenient point.

FREQUENCY AND DOSE: Depending on severity and rapidity of contamination, this product should be used from once a week to once a month at a concentration of 250-1000 ppm (2-8 pt./1,000 gallons.)]

**[OIL AND GAS PIPELINE AND TANK MAINTENANCE]**

For use in water bottoms in crude and refined hydrocarbon storage tanks, piping and transportation systems.

To control aerobic and anaerobic bacteria, particularly sulfate-reducing bacteria, growth in oil and gas related production piping and transportation systems, inject this product directly into the water bottom or pipeline, or add to the hydrocarbon phase. Addition of this product will produce long-term water concentrations by a diffusion process.

FREQUENCY AND DOSE: Slug treatments are recommended for both storage and transportation systems and can vary from daily to monthly to control growth. This product should be applied to achieve 250-2,000 ppm in the aqueous phase. Higher concentrations may be used to allow diffusion into the aqueous phase. Dose will depend on the volume of crude or oil and the expected water fraction.]

**[METALWORKING FLUIDS]**

For use in soluble oils, semi-synthetic and synthetic fluids. Add directly to the sump and circulate for about one hour before shutdown. This product may be incorporated in metalworking fluid concentrate by the manufacturer who should ensure that any incompatibility will not affect efficacy.

In diluted fluids 2,500-10,000 ppm of this product is sufficient to control microbial growth (5 gallons of this product in 1,000 gallons will give a dose level of 5,000 ppm). For maintenance, add 1,000-4,000 ppm of this product.]

**[PAPER MILL PROCESS WATER]**

To control slime-forming bacteria in paper or paperboard process water systems, this product may be dosed at a convenient point early in the process system (machine chest, constant head box or backwater loop system).

FREQUENCY AND DOSE: This product should be shock-dosed once to three times daily in quantities sufficient to meet the required dose based on the daily production of finished products. At 10-250 ppm in the process water depending on the complexity of the system, quality of raw paper and type and degree of contamination. This equates to 100-2,500 mL (0.2-5 pt.) per ton of finished paper or paperboard.]

**[PAPER MILLS – BULK PULP]**

To preserve bulk quantities of pulp in paper and paperboard manufacturing systems or to prevent foul odors and general biodegradation of stock when it is stored in bulk for any significant period of time, add this product directly into the hydropulper, machine chest or stock chest.

FREQUENCY AND DOSE: In general a single slug dose will provide control for up to 3 days or longer, depending upon the initial level of contamination in the stock. In situations where the contamination is high, repeat dosing every 1-7 days may be required. This product should be dosed at 4-16 pt./1,000 gallons per ton of stock depending on the degree of contamination.]

**[WATER BASED PRINTING INKS AND FOUNTAIN SOLUTIONS]**

To inhibit the growth of spoilage bacteria during the storage and use of water-based printing inks and fountain solutions. For in-can preservation, add this product at any convenient point in the manufacturing process. Ideally, this product should be added as a final step after any heating stage and when the product has cooled to below 40°C. To control bacterial spoilage during the use of fountain solutions, shock dose this product at 500-1,000 ppm (4-8 pt./1,000 gallons) at a suitable point in the fountain reservoir where there is adequate flow or turbulence to ensure quick mixing.



FREQUENCY AND DOSE: This product may be shock-dosed once or twice weekly in the fountain as a normal routine, or more frequently if required.

IN-CAN PRESERVATION: This product should be dosed at 1,000-5,000 ppm based on the final formulation volume depending on level of contamination. (8-40 pt./ 1,000 gallons)

FOUNTAIN SOLUTIONS: This product should be shock-dosed at 400-1,000 ppm (4-8 pt./1,000 gallons) depending on the level of contamination in the fountain reservoir.]

#### **[INDUSTRIAL AND/OR COMMERCIAL AIR WASHERS, AIR CONDITIONING AND HUMIDIFYING SYSTEMS**

For the control of bacterial and algal growth and to remove built up slime deposits. Shock dosing is preferred and should be carried out into the water sump on a routine basis once per week or month. Heavily fouled systems may require twice weekly treatment.

The initial dose of this product should be 475 mL/cubic meter or 3.8 pt./1,000 gallons (equivalent to 50 ppm active ingredient). Subsequent dosing can be reduced by half.

Intermittent treatment during regular maintenance and cleaning at a level to 100 ppm active ingredient is also recommended with a contact time of at least one hour.]

#### **[ADHESIVES**

For control of microbial contamination, add 1-10 lbs. of this product per 1,000 lbs. total formulation weight. The addition is best accomplished by adding the product to any water to be incorporated into the formulation.]

#### **[ABSORBENT CLAYS**

Impregnate absorbent clays, corn cobs or ground wood with this product to inhibit the growth of odor-causing bacteria. The suggested application rate is 250-2,000 ppm of this product (0.4-3.2 oz. av. per 100 pounds of clay).]

#### **[STARCH, PIGMENT AND MINERAL SLURRIES [(not approved for this use in the state of California)]**

To inhibit the growth of spoilage bacteria during the manufacture, storage and distribution of water-based suspension concentrates, this product may be dosed at or close the end of the manufacturing process in a quantity of the process water. If the manufacturing process involves a heating stage, this product should be added after the product has cooled to below 40°C.

FREQUENCY AND DOSE: This product should be dosed at 1,000-5,000 ppm based on the final formulation volume (8-40 pt./1,000 gallons). **Not for use in pigments in the State of California.]**

#### **[PAINTS, LATEX AND OTHER EMULSION SYSTEMS**

To provide in-can preservation and prevent bacterial spoilage during storage of acrylic, styrene-acrylic, polyvinyl acetate, and other latex emulsion, latex emulsion based paints, photographic emulsions, silicone and other antifoam emulsion systems, and to prevent spoilage of in-service paint applications tanks, add this product at any convenient point during the manufacturing process. Ideally, it should be added as a final step just prior to packing of the product into bulk or sales packs. If a heating stage is involved during manufacturing, add this product after this stage when the product has cooled to below 40°C.

Addition to application tanks should be by slug dosing the tank as needed to prevent bacterial spoilage.

FREQUENCY AND DOSE: This product should be dosed at 1,000-5,000 ppm (0.4 – 3.2 oz. av. per 100 pounds of absorbent material).

Add This product at 1,000-5,000 ppm based on the final formulation volume (8-40 pt./1,000 gallons).]

#### **[HIDES AND SKINS [(not approved for this use in the state of California)]**

This product is used to prevent bacterial decomposition of hides and skins. When the product is used for temporary preservation, it is applied at 0.1 – 1.0% (1,000-10,000 ppm) based on the weight of green

fleshed hides and skins. The specific dosage and contact time will be dependent on the condition of the hides and the desired length of preservation. When used for preservation in the brine of hides/skins, this product should be used at a level of 0.005 – 0.5% (50-5,000 ppm) in a raceway or at 0.005 – 0.5% (50-5,000 ppm) in a mixer based on the total weight of hides and skins and saturated brine solution. In raceway operations it can be added directly to the raceway during the addition of hides and operation of paddles. In processor/mixer operation the product should be added as dispersion in water. A satisfactory dispersion of 1 part of this product plus 4 parts water can be prepared by adding this product to the water (as opposed to adding water to this product) with agitation.]

**[LEATHER [(not approved for this use in the state of California)]**

This product can be used to prevent bacterial decomposition of brine-cured, wet-salted, air-dried, or green fleshed hides and skins in the soaking process. For this purpose, this product can be used at treatment levels of 0.005 – 0.3% (50-3,000 ppm) based on the weight on the hides/skins and process water (float) and added as dilution in water. A satisfactory dilution of 1 part of this product plus 9 parts water can be prepared by adding this product to the water (as opposed to adding water to this product) with agitation. This dilution should be made immediately prior to use in the soaking process and added directly to the soak tank, paddles, mixers, or drums as suitable.]

## **STORAGE AND DISPOSAL**

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

### **PESTICIDE STORAGE**

Product should be stored in an area that is not subject to extreme temperatures. Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.

### **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 HANDLING:**

*{For plastic containers less than or equal to 5 gallons.}*

[Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

*{For plastic containers greater than 5 gallons.}*

[Nonrefillable container. Do not reuse or refill this container. 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. Recap 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. Turn the container over onto its other 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]



**[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.

11636 Huntington Road

Gallipolis Ferry, WV 25515

{for DOMESTIC labels only:}[Tel: 1-(877) 661-4272]

{for INTERNATIONAL labels only:}[Tel: 1-(314) 983-7884]

EPA Reg. No.: 8622-84

EPA Est. No.: \_\_\_\_\_

[Material][Label] No. \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_[lbs.][kg.][gal.][fl. oz.]

[Batch][Lot] No. \_\_\_\_\_