

6836-315

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1/6



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR 30 2006

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Georgia Anastasiou, Agent  
Lonza, Inc.  
90 Boroline Rd.  
Allendale, N.J. 07401

SUBJECT: March 17, 2006 Label Amendments  
Dantoin BCDMH RW Granular  
EPA Registration 6836-315

Dear Ms. Anastasiou:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the following conditions:

- Line up the decimal points in the ingredients statement on the front panel;
- On page 3, delete "that no contact food" at end of second sentence under Paper and Paperboard Process Water.
- On page 3, amend last sentence on left panel to read "Repeat treatment to achieve 0.1 -1.0 ppm total available chlorine as measured by suitable test kit."
- On page 3, change word till to will under Air Conditioner Drip Pans.
- On page 3, change beginning of last sentence from "Swimming may begin when...." to Do not enter spa or hot tub until...."
- On page 4 change "insure" to "ensure".

In summary, your request to add Superoxidation instructions and revise the pH lower range value in the Disinfecting Spas & Hot Tubs has been accepted. A copy of your conditionally accepted label marked with the requested edits is enclosed.

If you have any questions regarding this letter, please contact Tom Luminello of my staff at (703) 308-8075.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Emily H. Mitchell".

Emily H. Mitchell

Product Manager (32)

Regulatory Management Branch II

Antimicrobial Division (7510-C)

Enclosure

2/c

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

**DANGER: HARMFUL OR FATAL IF SWALLOWED. HIGHLY CORROSIVE. DO NOT TAKE INTERNALLY.** Causes eye and skin damage. Irritating to nose and throat. Avoid breathing dust. Use with adequate ventilation. Do not get in eyes, on skin, or clothing. Wear rubber gloves, chemical goggles and face shield when handling. Wash thoroughly after handling. Immediately remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. 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 AND CHEMICAL HAZARDS**

**CHEMICAL HAZARDS. STRONG OXIDIZING AGENT.** Mix only with water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter, or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases and possible generation of fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood with large volumes of water, if necessary.

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MAR 30 2006

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**Dantoin® BCDMH-RW  
Granular**

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delimit  
point

Active Ingredients:	
1-bromo-3-chloro-5,5-dimethylhydantoin.....	97.70%
Inert Ingredients.....	2.30%
Total.....	100.0%

Available bromine	64.73%
Available chlorine	28.72%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**FIRST AID**

**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 ON CLOTHING:**

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

**IF INHALED:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:**

- Call a 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 a 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.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**SEE LEFT PANEL FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS**

EPA Reg. No. 6836-315  
EPA Est. No. 6836-PA-1  
Net Weight

Manufactured by:  
LONZA INC.  
17-17 Route 208  
Fair Lawn, NJ 07410

3/6

[Comments in brackets are optional marketing language.]

**DIRECTIONS FOR USE**

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

**RECIRCULATING COOLING WATER SYSTEMS**

**Dantoin® BCDMH-RW Granular** aids in the control of bacterial, fungal and algal slimes in commercial and industrial cooling towers; heat exchange water systems; evaporative condensers; influent water systems such as flow-through filters, cooling ponds, canals and lagoons; industrial water scrubbing systems; brewery pasteurizers; sewage systems (septic tanks, leach fields, tank lines, sewers, lagoons and sewage effluent water); photo processing wash water; food and non-food contact paper and paper process water; industrial air washing systems equipped with a mist eliminator; cannery cooling, cannery water, cannery package warmers, cannery pasteurizer water and retort water.

This product may be added to the systems either continuously or intermittently or as needed. The frequency of feeding and duration of the treatment will depend upon the severity of the problem.

Badly fouled systems must be cleaned before treatment is begun.

**FOR CONTROL OF ALGAE, BACTERIA AND FUNGI**

**INTERMITTENT OR SLUG METHOD**

**Initial Dose:** When the system is noticeably fouled add 0.2 to 0.6 pounds to 1000 gallons (0.24 to 0.72 kilograms/10,000liters) of the water in the system. Repeat initial dosage until 1 to 3 ppm bromines residual is established for at least 4 hours.

**Subsequent Dose:** When microbial control is evident add 0.1 to 0.3 pounds to 1000 gallons (0.12 to 0.36 kilograms/10,000 liters) of water in the system. Repeat as needed to maintain 1 to 3 ppm bromine residual for at least 4 hours.

**AIRWASHERS**

When used as directed **Dantoin® BCDMH-RW Granular** effectively controls algal, bacterial and fungal slimes in industrial air washing systems equipped with effective mist eliminating components.

**INTERMITTENT OR SLUG METHOD**

**Initial Dose:** When the system is noticeably fouled, 0.2 to 0.6 pounds/1000 gallons (0.24 to 0.72 kilograms/10,000 liters) of water contained in the system. Repeat initial dosage until 1 to 3 ppm bromine residual is established for at least 4 hours.

**Subsequent Dose:** When microbial control is evident, add 0.1 to 0.3 pounds/1000 gallons (0.12 to 0.36 kilograms/10,000 liters) of water contained in the system. Repeat as needed to maintain 1 to 3 ppm bromine residual for at least 4 hours.

Badly fouled systems must be cleaned before treatment is begun.

**ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS**

When used as directed, **Dantoin® BCDMH-RW Granular** effectively controls algal, bacterial, fungal slimes and mollusks in open or closed-cycle, fresh or salt water, once-through cooling systems; cooling ponds, canals and lagoons. Treat cooling water with **Dantoin® BCDMH-RW Granular** at the system intake or other critical areas, where mixing is uniform.

**DOSAGE RATES**

**INITIAL DOSE:** When system is noticeably fouled, add 0.2 to 0.6 pounds per 1000 gallons (0.24 to 0.72 kilograms/10,000 liters) of water contained in the system. Repeat initial dosage until one to three ppm (mg/L) bromine residual is established for at least 4 hours.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.1 to 0.3 pounds per 1000 gallons (0.12 to 0.36 kilograms/10,000 liters) of water contained in the system. Repeat as needed to maintain one to three ppm bromine residual for at least 4 hours.

**FOR USE IN CANISTERS**

**TO INSTALL CANISTER:** Take feeder cap off. Remove canister cut offs. Hold canister so the open end faces down. Insert into feeder.

The end of the canister must align with the L-key located inside the feeder at the bottom. **DO NOT FORCE.** Replace feeder cap. To achieve the proper halogen residual, turn the control dial to the appropriate setting and add the required product dosage. Refer to use directions for recirculating cooling water systems and sewage systems or airwasher systems, as appropriate.

Check the canister periodically and replace when empty. Do not attempt to open or refill this canister. **DO NOT REUSE.**

**PRECAUTION:**

The warranty will be void if this canister is not used with the appropriate feeder. Fire or explosion may result if this canister is used with an incorrect chemical feeder.

**NOTE:** Some settling may occur during shipment.

**PHOTO PROCESSING WASH WATER**

The photo processing system should first be properly cleaned with a mild hypochlorite solution following manufacturer's instructions. The use of **Dantoin® BCDMH-RW Granular** IS NOT intended to remove an existing buildup of biological growth. **Dantoin® BCDMH-RW Granular** slowly releases both hypobromous and hypochlorous acid when exposed to a flow of water. To prevent or substantially reduce biological growth, **Dantoin® BCDMH-RW Granular** should be introduced into the wash water by suspending the product directly in the wash tanks as far as possible from film or paper and away from areas of extreme turbulence. Begin by placing **Dantoin® BCDMH-RW Granular** in the wash tank. If biological growth is observed, add more **Dantoin® BCDMH-RW Granular**, waiting several hours between additions. To prevent film damage, rinse **Dantoin® BCDMH-RW Granular** in water before placing

4/6

into wash tank. It is intended that 1.0 to 3.0 ppm of residual bromine be introduced into the water supply line. Three (3) to 9 grams of **Dantoin® BCDMH-RW Granular** will introduce 1.0 to 3.0 ppm residual bromine in 1,000 gallons of water. Actual use will depend on the amount of biological fouling. To avoid excess introduction of bromine/chlorine into the processor wash tanks, a bromine or chlorine test kit should be used to periodically test the water in the wash tanks. If a residual above 3.0 ppm bromine is indicated, the feed rate of product should be reduced until the residual drops to 1.0 ppm. If the processor is turned off for any extended period of time, the **Dantoin® BCDMH-RW Granular** in the wash tanks should be removed.

**NOTE:** Seller liability under all warranties, expressed or implied, is limited to replacement of defective product and seller shall have no liability for consequential damages.

**PAPER AND PAPERBOARD PROCESS WATER**  
**FOOD AND NON-CONTACT FOOD**

When used as directed, **Dantoin® BCDMH-RW Granular** effectively controls algal, bacterial and fungal 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 and other process water. **Dantoin® BCDMH-RW Granular** is suitable for use as a slimicide for the process water used in the manufacture of paper and paperboard products, ~~that no contact food.~~ Treat water at critical areas in the system process where mixing of the product with influent will be uniform. The frequency and duration of the treatment will depend upon the severity of the problem. Badly fouled process systems must be cleaned before initial treatment

*delete*

**Dantoin® BCDMH-RW Granular** can be used in the manufacture of both food and non-food contact paper and paperboard.

**PRODUCT APPLICATION**

**Dantoin® BCDMH-RW Granular** should be added to process water streams at or immediately prior to a point of sufficient mixing such as the fan pump or wire pit.

Standard dissolution feeders can be used for **Dantoin® BCDMH-RW Granular** applications. Make-up, machine white waters and returning clarified dilution waters are examples of acceptable treatment waters.

**INITIAL DOSE:** When the system is noticeably fouled apply 0.1 - 1.0 pounds of **Dantoin® BCDMH-RW Granular** to 1,000 gallons or 12 to 120 ppm of water in the system. (0.1 to 1.0 pounds of **Dantoin® BCDMH-RW Granular** per dry metric ton of paper produced). Repeat treatment until residual of up to 5 ppm bromine is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, apply 0.1 to 0.75 pounds of **Dantoin® BCDMH-RW Granular** to 1000 gallons or 12 to 90 ppm of water in the system. (0.1 to 0.75 pounds of **Dantoin® BCDMH-RW Granular** per dry metric ton of paper produced). Repeat treatment until to achieve 0.1-1.0 ppm total available halogen as chlorine. Repeat treatment until residual of up

*as measured by suitable test kit.*

to 1 ppm bromine is achieved.

**WATER FEATURES**

**DANTOIN® BCDMH-RW Granular** when used as directed is effective as a water feature sanitizer and disinfectant.

**Dosage Rates**

Ensure all equipment is working properly. Backwash filter system (if present) following manufacturer's directions. Adjust pH to between 7.2 - 7.6. When using other products as outlined in directions for this product, always follow directions on those products.

A bromine or chlorine residual of 1 - 2 ppm must first be established in the water. If the residual is established with this product in a feeder, use the feeder at the highest feed rate following manufacturer's recommendations. When the bromine residual reaches 1 - 2 ppm adjust the feeder accordingly. To maintain bromine residual, adjust the feeder feed rate to assure a constant treatment level of 1 - 3 ppm. Regular use of a test kit is necessary to maintain a bromine residual in the water.

**COMMERCIAL AIR CONDITIONER AND DEHUMIDIFIER BASINS OR DRIP PANS**

When used as directed, **Dantoin® BCDMH-RW Granular** effectively controls microbial slimes in areas where water collects.

**Dosage Rates**

Place this product in the basin or drip pan close to the outlet drain in an appropriate dispenser. Use one or more ounces as necessary to maintain the cleanliness of the system. The amount of product needed <sup>(till)</sup> vary with temperature, humidity, and condensate volume.

*will*

**WASTEWATER TREATMENT SYSTEMS**

When used as directed, **Dantoin® BCDMH-RW Granular** effectively controls algal, bacterial and fungal slimes and offers rapid disinfection of primary, secondary and tertiary wastewater treatment systems.

**Dosage Rates**

Add 0.1 to 0.6 pounds/1000 gallons (0.12 to 0.72 kilograms/10,000 liters) of water treated to maintain a 0.5 to 5.0 ppm bromine residual at the injection point in the disinfection contact chamber. Do not use treated wastewater to irrigate crops.

**DISINFECTING SPAS AND HOT TUBS**

When used as directed, **Dantoin® BCDMH-RW Granular** is effective as a spa and hot tub sanitizer and disinfectant.

Ensure all spa equipment is working properly. Backwash the filter system following manufacturer's directions. Adjust pH to between 7.2 to 7.6. Superoxidate to obtain a residual of 10 to 20 ppm available bromine (5 to 10 ppm available chlorine) as determined by a suitable test kit. ~~Swimming may begin when~~ the bromine level

*Do not enter spa or hot tub until.*

56

drops below 6 ppm When using other products as outlined in directions for this product, always follow directions on those products. Fill spa bromine feeder with **Dantoin® BCDMH-RW Granular** and adjust feeder following manufacturer's directions to yield bromine residual between [2 – 4 ppm in residential spas] [and] [4 – 6 ppm in commercial spas]. Check feed regularly and add additional **Dantoin® BCDMH-RW Granular** as needed to maintain the bromine residual. The pump and filter should be operated for at least three hours every day whether spa is used or not. [Do not heat water above 102 degrees F]. [Do not heat water above spa manufacturer's recommended maximum temperature]. Keep spa free of leaves and other debris. To maintain clear, clean water and insure performance of your spa chemicals, spas should be drained and refilled with fresh water [every 60 days in residential spas] [or] [a minimum of every 7 days in commercial spas].

**SUPEROXIDATION:** Water soluble, non-filterable wastes can accumulate in pool water and cause dull or cloudy water and can stimulate algal growth. Superoxidation or superchlorination with a suitable oxidizing shock treatment should be done weekly or bi-weekly, after extremely heavy bather loads or heavy rain storms. Suitable oxidizing agents are those based on calcium hypochlorite, lithium hypochlorite, sodium hypochlorite or potassium peroxymonopersulfate.

ensure  
**Directions for use with floater devices**

Ensure all spa equipment is working properly. Backwash the filter system following manufacturer's directions. Adjust pH to between 7.2 to 7.6. Place **Dantoin® BCDMH-RW Granular** in spa and let it float freely in the spa or hot tub. Under normal use conditions, use one dispenser per 350 gallons of spa or hot tub water. However under heavy bather loading or reduced water circulation, additional dispensers may be used to maintain constant active bromine residuals of 2 to 4 ppm in residential spas or hot tubs. To increase bromine residual, turn rotating cap to a higher number located in the flow indicator window. To decrease the bromine residual, turn to a lower number in the flow indicator window.

[To a freshly filled spa or hot tub, begin with an indicator setting of #5]. Check the bromine residual frequently. When a 2 to 4 ppm bromine residual is obtained, lower the flow indicator setting to maintain constant bromine residuals. The pump and filter should be operated for at least three hours per day. [Do not heat water above 102 degrees F]. [Do not heat water above spa manufacturer's recommended maximum temperature]. Keep spa free of leaves and other debris. To maintain clear, clean water and insure performance of your spa chemicals, spas should be drained and refilled with fresh water [every 60 days in residential spas].

**DISINFECTING SWIMMING POOLS**

When used as directed, **Dantoin® BCDMH-RW Granular** is effective as a swimming pool water sanitizer and disinfectant.

Ensure all pool equipment is working properly. Backwash the filter system following manufacturer's directions. Adjust pH to between 7.2 to 7.6. Superoxidate to obtain a residual of 10 to 20 ppm available bromine (5 to 10 ppm available chlorine) as determined by a suitable test kit. Swimming may begin when the bromine level drops below 6 ppm. When using other products as outlined in directions for this product, always follow directions on those products. A bromine or chlorine residual of 1 to 3 ppm must first be established in the pool. If the residual is established with this product in a feeder, use the feeder at the highest feed rate following manufacturer's recommendations. When bromine residual reaches 1 to 3 ppm, adjust the feed accordingly. To maintain bromine residual, adjust feeder feed rate to assure a constant treatment level of (optional text: either residential or commercial or both will be used on label) [1 to 3 ppm in residential pools] [and] [3 to 5 ppm in commercial pools]. Regular use of test kit or test strips is necessary to maintain a bromine residual in the pool water.

ACCEPTED  
with COMMENTS  
in EPA Letter D-0000

MAR 30 2006

6836-315

6/10

**STORAGE AND DISPOSAL**

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. Keep container tightly closed. Store in a dry place. Do not store at elevated temperatures.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray or mixture of 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 DISPOSAL:**

**Metal Containers:** Triple rinse (or equivalent), then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Plastic Containers:** Triple rinse (or equivalent), then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Fiber Drums with Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

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6836-315