



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Antimicrobials Division (7510C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:

6836-317

Date of Issuance:

November 4,  
2003

Term of Issuance: Conditional

Name of Pesticide Product: Dantoin  
BCDMH RW Tablets

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Wendy A. McCombie, Agent for Lonza, Inc  
c/o Lewis & Harrison  
122 C Street N.W., Suite 740  
Washington, D.C. 20001

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to the use of the label in commerce. In any correspondence on this product always refer to the above 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.

Registration is in no way to be construed as an endorsement or recommendation of this product by the 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 sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit two copies of the revised final printed label for the record changing the EPA File symbol 6836-GRT to EPA Registration Number 6836-317.
3. Change the levels of available bromine and chlorine to 64.73% and 28.72% respectively. Submit remainder of product chemistry data as described in enclosed review.
4. Revise the Statement of Practical Treatment in accordance with Pesticide Registration Notice 2001-01 as follows:

**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 further treatment advice.

(Continued on page 2)

Signature of Approving Official:

*Robert S. Brennis*  
Robert S. Brennis  
Product Manager 32

Date:

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If On Skin Or Clothing:

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

If Inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by 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 for further 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.

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison center or doctor, or going for treatment. You may also contact 1 (800) xxx-xxxx for emergency medical treatment information.

5. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 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.

*R*

**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.

*Revise per 2001-1*

**ACCEPTED**  
with **COMMENTS**  
in EPA Letter Dated:

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Registration  
Division  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

6836-317

**Dantoin® BCDMH RW  
Tablets**

*up decimal points*

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

Available bromine 64.73 69.6%  
Available chlorine 28.72 26.0%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

*Make bigger*

**STATEMENT OF PRACTICAL TREATMENT (FIRST AID)**

**FOR EYE CONTACT:** Flush eyes with large amount of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. If physician is not available, flush for additional 15 minutes. Get immediate medical attention.

**FOR SKIN CONTACT:** Immediately wipe away excess chemical with a dry cloth while removing contaminated clothing and shoes. Under a safety shower, wash affected areas thoroughly with large amounts of water, and soap if available, for at least 15 minutes. Get immediate medical attention. Discard or decontaminate clothing and shoes.

**IF INHALED:** Remove from area to fresh air. If not breathing, clear airway and start mouth-to-mouth artificial respiration or use a bag-mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

**IF SWALLOWED:** Immediately give several glasses of water. DO NOT induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if patient's condition allows induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

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

SEE LEFT PANEL FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS

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

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

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Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for this pesticide, 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 Tablets in the system intake or other critical areas, where mixing is uniform.

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[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 Tablets 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** *add space*

**Initial Dose:** When the system is noticeably fouled add 0.2 to 0.6 pounds to 1000 gallons (0.24 to 0.72 kilograms/10,000 liters) 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 Tablets 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 Tablets effectively

**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 Tablets IS NOT intended to remove an existing buildup of biological growth. Dantoin® BCDMH-RW Tablets slowly releases both hypobromous and hypochlorous acid when exposed to a flow of water. To prevent or substantially reduce biological growth, Dantoin® BCDMH-RW Tablets should be introduced into the water supply line after the water mixing valve and before the processor wash tanks. **IMPORTANT. DO NOT USE WATER FROM THIS LINE TO MIX CHEMICALS!** This may be accomplished by placing 4 - 5 Dantoin® BCDMH-RW Tablets into an empty filter housing or chemical feeder plumbed in at that point. The feeder apparatus should be equipped with a flow regulating valve to control the introduction of bromine and chlorine into the water. Begin by placing Dantoin® BCDMH-RW Tablets with the regulating valve at a low setting. If biological growth is observed, increase the flow in small increments until growth is controlled. 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 tablets 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

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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 tablets should be reduced until the residual drops to 1.0 ppm

**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 Tablets** 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 Tablets** is suitable for use as a slimicide for the process water used in the manufacture of paper and paperboard products that no contact is made. 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

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

**PRODUCT APPLICATION**

**Dantoin® BCDMH-RW Tablets** 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 Tablets** 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 Tablets** to 1,000 gallons or 12 to 120 ppm of water in the system. (0.1 to 1.0 pounds of **Dantoin® BCDMH-RW Tablets** 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 Tablets** to 1000 gallons or 12 to 90 ppm of water in the system. (0.1 to 0.75 pounds of **Dantoin® BCDMH-RW Tablets** 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 to 1 ppm bromine is achieved.

**WATER FEATURES**

**Dantoin® BCDMH-RW Tablets** 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.

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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 Tablets** 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 will vary with temperature, humidity, and condensate volume.

**WASTEWATER TREATMENT SYSTEMS**

When used as directed, **Dantoin® BCDMH-RW Tablets** 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 Tablets** 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 to 7.6. 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 Tablets** 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 Tablets** 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].

**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 to 7.6. Place Dantoin® BCDMH-RW Tablets 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 Tablets 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. 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  
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General Insecticide,  
and Rodenticide Act as  
a model for the pesticide,  
registered under EPA Reg. No.

6836-317

**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.

**ACCEPTED**  
**with COMMENTS**  
**in EPA Letter Dated:**  
**NOV - 4 2003**

**under the Federal Insecticide,**  
**Fungicide, and Rodenticide Act as**  
**amended, for the pesticide,**  
**registered under EPA Reg. No.**  
**6836-317**