

**Dantoin BCDMH RW tablets**

Version 1.2

MSDS Number: 000000009999

Revision Date: 2015.05.29

**SECTION 1. IDENTIFICATION**

Commercial Product Name : Dantoin BCDMH RW tablets  
Product name : Dantoin BCDMH RW tablets  
Product code : 000000009999

**Manufacturer or supplier's details**

Company : **Lonza Inc.**  
90 Boroline Road  
Allendale, NJ 07401  
USA  
Business Telephone 1-201-316-9200

**Lonza Inc.**  
1200 Bluegrass Lakes Pkwy  
Alpharetta, GA 30004  
USA  
Business Telephone 1-678-624-5800

E-mail address : prodinfo@lonza.com  
Emergency telephone number : +41 61 313 94 94 (24h )  
For US only CHEMTREC 1-800-424-9300

**Recommended use of the chemical and restrictions on use**

Recommended use : Biocides

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Oxidizing solids : Category 3  
Acute toxicity (Oral) : Category 4  
Skin corrosion : Category 1C  
Serious eye damage : Category 1  
Skin sensitisation : Category 1

**GHS Label element**

Hazard pictograms : 

Signal word : Danger

Hazard statements : H272 May intensify fire; oxidiser.

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H302 Harmful if swallowed.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.

## Precautionary statements

: **Prevention:**  
 P210 Keep away from heat.  
 P220 Keep/Store away from clothing/ combustible materials.  
 P221 Take any precaution to avoid mixing with combustibles.  
 P260 Do not breathe dust or mist.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
 P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.  
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P363 Wash contaminated clothing before reuse.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**  
 P405 Store locked up.

**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Substance

**Hazardous components**

Chemical Name	CAS-No.	Concentration (%)
Bromochloro-5,5-dimethylimidazolidine-2,4-dione	32718-18-6	96.00

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**SECTION 4. FIRST AID MEASURES**

- If inhaled : Move to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Give oxygen.  
First aider needs to protect himself.  
Call a physician immediately.
- In case of skin contact : Take off all contaminated clothing immediately.  
After contact with skin, wash immediately with plenty of soap and water.  
Call a physician immediately.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Call a physician immediately.
- If swallowed : Call a physician immediately.  
Clean mouth with water and drink afterwards plenty of water.  
Do not induce vomiting without medical advice.  
Never give anything by mouth to an unconscious person.
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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry powder  
Foam  
Water
- Specific hazards during firefighting : Heating or fire can release toxic gas.  
  
May intensify fire; oxidiser.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.
- Environmental precautions
- General advice : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
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**SECTION 7. HANDLING AND STORAGE**

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- |                             |   |   |
|-----------------------------|---|---|
| Advice on safe handling     | : | Provide sufficient air exchange and/or exhaust in work rooms.<br>Avoid contact with skin and eyes.<br>Avoid formation of respirable particles.            |
| Conditions for safe storage | : | Keep container tightly closed.<br>To maintain product quality, do not store in heat or direct sunlight.<br>Keep in a dry, cool and well-ventilated place. |
| Materials to avoid          | : | Keep away from combustible material.  |
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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Appropriate engineering controls****Personal protective equipment**

- |                          |   |   |
|--------------------------|---|---|
| Respiratory protection   | : | In the case of dust or aerosol formation use respirator with an approved filter.  |
| Hand protection          | : |   |
| Material                 | : | Nitrile rubber  |
| Rate of permeability     | : | > 480 min   |
| Eye protection           | : | Tightly fitting safety goggles  |
| Skin and body protection | : | Choose body protection according to the amount and concentration of the dangerous substance at the work place.<br>No special protective equipment required.   |
| Hygiene measures         | : | Wash hands before breaks and immediately after handling the product.<br>Avoid contact with skin, eyes and clothing.<br>Remove and wash contaminated clothing and gloves, including the inside, before re-use. |
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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- |                     |   |   |
|---------------------|---|---|
| Appearance          | : | tablet  |
| Colour              | : | white   |
| Odour               | : | odourless   |
| Odour Threshold     | : | no data available   |
| pH                  | : | no data available   |
| Melting point/range | : | 156 - 162 °C<br>Decomposition: yes<br>Method: OECD Test Guideline 102 |

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Decomposition temperature	: 165 °C
Boiling point/boiling range	: Decomposition: yes Not applicable
Flash point	: 142 °C
Evaporation rate	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 3.8 mPa (25 °C) Method: OECD Test Guideline 104
Relative vapour density	: no data available
Relative density	: 1.87 (23 °C) Method: OECD Test Guideline 109
Solubility(ies) Water solubility	: hydrolyses Method: OECD Test Guideline 105
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Decomposition temperature	: no data available
Viscosity Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Oxidizing properties	: The product has been shown not to be oxidising in a test following Directive 67/548/EEC (Method A17, oxidising properties). Method: Oxidizing properties (solids)

**SECTION 10. STABILITY AND REACTIVITY**

Possibility of hazardous reactions	: Stable under normal conditions.
Conditions to avoid	: Elevated temperature and impurities (alkalis). Protect from moisture.
Incompatible materials	: Bases Strong acids and oxidizing agents Combustible material
Hazardous decomposition products	: Bromine Chlorine Nitrogen oxides (NOx) Carbon oxides

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**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : Eyes  
Skin  
Ingestion  
Inhalation

**Acute toxicity**

Acute oral toxicity (LD50) : 485 mg/kg  
Species: Rat  
Method: FIFRA  
GLP: yes

Acute oral toxicity (LD50) : 700 mg/kg  
Species: Mouse (male)  
Method: FIFRA  
GLP: yes

Acute dermal toxicity (LD50) : > 2,000 mg/kg  
Species: Rabbit  
Method: FIFRA

**Skin corrosion/irritation**

Skin irritation : Corrosive  
Species: Rabbit  
Exposure time: 4 h  
Method: OECD Test Guideline 404  
GLP: yes

**Serious eye damage/eye irritation**

Eye irritation : Corrosive  
Species: Rabbit  
Method: FIFRA  
GLP: yes

**Respiratory or skin sensitisation**

Sensitisation : Test Type: Buehler Test  
Species: Guinea pig  
Result: Sensitising  
GLP: yes

**Germ cell mutagenicity**

Genotoxicity in vitro : positive  
Ames test, Salmonella typhimurium  
Metabolic activation: yes Method: OECD Test Guideline 471

positive  
Gene mutation, mouse lymphoma cells  
Metabolic activation: yes Method: OECD Test Guideline 476

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Genotoxicity in vivo : negative  
In vivo micronucleus test  
Species: Mouse  
Method: OECD Test Guideline 474

negative  
Test UDS in vivo  
Species: Rat  
Method: OECD Test Guideline 486

**Further information**

Remarks: Information given is based on data on the components and the toxicology of similar products.  
No data is available on the product itself.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxicity to fish (LC50) : 0.65 mg/l  
Species: Oncorhynchus mykiss (rainbow trout)  
Acute toxicity  
Exposure time: 96 h  
Method: US-EPA  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (EC50) : 0.87 mg/l  
Species: Daphnia magna (Water flea)  
Immobilization  
Exposure time: 48 h  
Method: US-EPA  
GLP: yes

Toxicity to algae (ErC50) : 2 mg/l  
Species: Desmodesmus subspicatus (green algae)  
Growth inhibition  
End point: Growth rate  
Exposure time: 72 h  
Test Type: Growth inhibition  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to bacteria (EC50) : 20 mg/l  
Species: activated sludge  
Respiration inhibition  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Analytical monitoring: no  
Method: OECD Test Guideline 209  
GLP: yes

**Persistence and degradability**

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Stability in water : Degradation half life(t1/2): <= 91 h (25 °C) pH: 7  
Method: EPA-FIFRA  
GLP: yes

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Other adverse effects**

Additional ecological information : Information given is based on data on the components and the ecotoxicology of similar products.

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.  
Contact waste disposal services.

Contaminated packaging : Dispose of as unused product.  
Do not burn, or use a cutting torch on, the empty drum.

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**SECTION 14. TRANSPORT INFORMATION****IATA**

**UN number** : 3085  
**Proper shipping name** : Oxidizing solid, corrosive, n.o.s.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Labels : 5.1 (8)  
**Environmental hazards** : no

**IMDG**

**UN number** : 3085  
**Proper shipping name** : Oxidizing solid, corrosive, n.o.s.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Labels : 5.1 (8)  
EmS Number 1 : F-A  
EmS Number 2 : S-Q  
**Environmental hazards** : Marine pollutant: yes



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**ADR**

**UN number** : 3085  
**Proper shipping name** : OXIDIZING SOLID, CORROSIVE, N.O.S.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Classification Code : OC2  
Hazard Identification Number : 58  
Labels : 5.1 (8)  
**Environmental hazards** : yes

**RID**

**UN number** : 3085  
**Proper shipping name** : OXIDIZING SOLID, CORROSIVE, N.O.S.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Classification Code : OC2  
Hazard Identification Number : 58  
Labels : 5.1 (8)  
**Environmental hazards** : yes

**DOT**

**UN number** : 3085  
**Proper shipping name** : Oxidizing solid, corrosive, n.o.s.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Labels : 5.1 (8)  
Emergency Response Guidebook Number : 140  
**Environmental hazards** : no

**TDG**

**UN number** : 3085  
**Proper shipping name** : OXIDIZING SOLID, CORROSIVE, N.O.S.  
(Bromochloro-5,5-dimethylimidazolidine-2,4-dione)  
**Transport hazard class** : 5.1  
**Packing group** : III  
Labels : 5.1 (8)  
**Environmental hazards** : no

**Special precautions for user** : none

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not applicable

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**SECTION 15. REGULATORY INFORMATION**

**This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.**

Signal word : DANGER!  
Hazard statements : May be fatal if absorbed through skin.  
Corrosive. Causes skin burns.  
Corrosive. Causes irreversible eye damage.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know**

No components are subject to the Pennsylvania Right to know act

**New Jersey Right To Know**

No components are subject to the New Jersey Right to know act

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16. OTHER INFORMATION**

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