

Dantoin BCDMH RW tablets

Version 1.4

MSDS Number: 000000009999

Revision Date: 2015.07.06

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. Avoid contact with skin and eyes. Avoid formation of respirable particles.
Conditions for safe storage	:	Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.
Materials to avoid	:	Keep away from combustible material.

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. No special protective equipment required.
Hygiene measures	:	Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

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 Decomposition: yes 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.

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.

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.

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 : 140
Number
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.
EPA No. : 6836-317

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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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.