MATERIAL SAFETY DATA SHEET



B.I.O. BLAST 650G

HMIS NFPA			Personal protective equipment			
Health	3	3	Min a			
Fire Hazard	0	0				
Reactivity	0	0				
Reactivity	U					

Version Number: 2 Preparation date: 2004-11-23

PRODUCT AND COMPANY IDENTIFICATION

B.I.O. BLAST 650G Product name: MSDS #: 46871500269 Product code: 3481081, 3481090 Recommended use: Biocide.

Manufacturer, importer, supplier:

US Headquarters Canadian Headquarters Johnson Diversey, Inc. JohnsonDiversey - Canada, Inc. 8310 16th St. 2401 Bristol Circle Sturtevant, Wisconsin 53177-0902 Oakville, Ontario L6H 6P1 Phone: 1-888-352-2249 Phone: 1-800-668-3131

MSDS Internet Address: www.johnsondiversey.com

1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México) Emergency telephone number:

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. HIGHLY CORROSIVE . CAUSES EYE AND SKIN BURNS . MAY BE FATAL IF SWALLOWED . OXIDIZER . CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE .

Principle routes of exposure: Eyes. Skin. Inhalation. Skin contact: Severe skin irritation.

Eye contact: Corrosive. Causes irreversible eye damage . May be irritating to nose, throat, and respiratory tract. Inhalation:

Ingestion: May be irritating to mouth, throat and stomach. May be fatal if swallowed .

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

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Ingredient	CAS#	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation				
1-bromo-3-chloro-5,5-	16079-88-2	60 - 70%	Not available	Not available	Not available				
dimethylhydantoin									
1,3-dichloro-5-ethyl-5-	89415-87-2	10 - 20%	Not available	Not available	Not available				
methylhydantoin									
Dichloro dimethyl hydantoin	118-52-5	100	542 mg/kg (rat)	20 g/kg (rabbit)	Not available				

4. FIRST AID MEASURES

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Eye contact:

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call medical

attendant, medical doctor, or poison control center.

Take off contaminated clothing . Rinse skin immediately with plenty of water for 15-20 minutes . Call Skin contact:

medical attendant, medical doctor, or poison control center . Remove and wash contaminated clothing and footwear before re-use.

Inhalation: If breathing is affected, remove to fresh air. If person is not breathing, call 911 or an ambulance and then

give artificial respiration, preferably by mouth to mouth, if possible. Call medical attendant, medical doctor,

or poison control center .

B.I.O. BLAST 650G 1 of 4 Ingestion: Call medical attendant, doctor, or poison control center immediately. 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 . Never

give anything by mouth to an unconscious person.

Notes to physician:

Probable mucosal damage may contraindicate the use of gastric lavage .

Aggravated Medical Conditions:

Persons with pre-existing skin disorders may be more susceptable to irritating effects

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Flood with water. . Dry chemical, water spray, foam .

Specific hazards:

To minimize the progressive generation of noxious gases, flood burning material with large quantities of water. Must wear NIOSH/MSA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray . Oxidizer . Decomposition releases oxygen, which may intensify fire . In large fires fueled by other materials, this product may smolder for prolonged periods emitting a dense, black smoke . Fires fueled by other materials may release hydrogen bromide, bromine, hydrogen

chloride, or chlorine.

Unusual hazards:

Material is a strong oxidizer. May ignite combustible materials and may produce noxious gases. Products of combustion are toxic. This product is classified as an ST-1 dust explosive hazard (ASTM E-1226-88). Airborne dusts of this product in an enclosed space and in the presence of an ignition source may constitute an explosion hazard. Use adequate explosion-proof ventilation systems to control dust at the source. Avoid generating product dust near sources of ignition, including static electricity. Use safety measures in accordance with the 1988 edition of NFPA 654 (Standard for the Prevention of Dust

Explosions in the Chemical, Dye, Pharmaceutical, and Plastic Industries).

Specific methods:

No special methods required

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Extinguishing media which must not be used for safety reasons:

"Alcohol" foam . carbon dioxide .

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Environmental precautions and clean-up methods:

Put on appropriate personal protective equipment (see Section 8.). Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. DO NOT use combustible materials such as sawdust. DANGER! Oxidizing material. Possible dust explosion hazard. Do not get in eyes or on skin. Repeated or prolonged contact with skin can result in sensitization and/or irreversible tissue damage. Do not breathe dust. For spills, wear appropriate protective equipment and respiratory protection. Where dust may be generated, wear full-face respiratory protection and remove all sources of ignition. For large spills, or when spilled material comes in contact with water, self-contained breathing apparatus is preferred. Carefully sweep up spilled material (avoid generating dust) and place in an appropriate container for disposal. Do not contaminate with oxidizable materials. Neutralize any residue with dilute, alkaline sodium bisulfite or thiosulfite solution; absorb with sand or vermiculite and place in a compatible container for disposal. If spilled material is wet, neutralize and proceed as stated above. Material is toxic to fish. Do not discharge into lakes, streams, ponds, or public water unless in accordance with an NPDES permit.

7. HANDLING AND STORAGE

Handling:

Do not breathe dust. Avoid generating dust. Product is a strong oxidizer and is corrosive. Do not allow product to come in contact with oxidizable material. Please also see "Unusual Fire and Explosion Hazards" in section V of this MSDS for information on the dust explosivity of this material. Wear goggles, protectice clothing, and gloves . Mix only with water . Do not mix with any other product or chemical . **Storage:**

Store in a cool, dry place, isolated from all organic material. Avoid heat and direct sunlight. Keep container closed. Do not contaminate food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

In processes where dusts or airborne particulates may be generated, proper ventilation must be provided in accordance with good ventilation practices. Respiratory protection is not required if good ventilation is maintained.

Personal Protective Equipment

Eye protection: Chemical splash goggles.

Hand protection: Rubber gloves.

Skin and body protection: If major exposure is possible, wear suitable protective clothing and footwear.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that

meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace

conditions warrant a respirator's use.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice . Remove and wash contaminated

clothing and footwear before re-use. Eye wash; safety shower; protective clothing (long sleeves, coveralls

or other, as appropriate), to prevent skin contact.

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Ingredient	CAS#	ACGIH	OSHA	Mexico	
Dichloro dimethyl hydantoin	118-52-5	0.4 mg/m ³ (STEL)	0.2 mg/m ³ (TWA)	0.2 mg/m ³ (TWA)	
, ,		0.2 mg/m ³ (TWA)	0.4 mg/m ³ (STEL)	0.4 mg/m³ (STEL)	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: White

Odor: No information available

Specific gravity: 1.10 g/cc Dilution pH: 3.2 - 3.8 (1%)

No information available **Bulk density:** Vapor density: No information available **Evaporation rate:** No information available

solvents:

Viscosity: Variable

Solubility in other No information available

Partition coefficient (n-octanol/water): No information available

Appearance: Suspension

Boiling point/range: Not determined Melting point/range: Not determined

No information available pH:

Density: 1.10 g/ml

Decomposition temperature: Not determined No information available

Autoignition temperature: Solubility: Dispersible

VOC: No information available

Flash point: >200 (°F) >100 (°C)

10. STABILITY AND REACTIVITY

Stability: The product is stable

Polymerization: Hazardous polymerisation does not occur

Hazardous decomposition products: Thermal decomposition may produce toxic vapors/fumes of chlorine, bromine, organic materials, and

oxides of carbon and nitrogen.

Materials to avoid: Strong acids . Strong bases. Organic materials.

11. TOXICOLOGICAL INFORMATION

Oral, LD50 estimated to be > 2000 mg/kg. Acute toxicity

Component Information: See Section 3

Chronic toxicity: Repeated skin exposure can cause sensitization.

Specific effects

Carcinogenic effects: None known Mutagenic effects: None known Reproductive toxicity: None known Target organ effects: None known

12. ECOLOGICAL INFORMATION

Environmental Information: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Material is toxic to fish. Do not discharge into lakes, streams, ponds, or public water unless in accordance with an NPDES permit . Dispose of in compliance with all Federal, state, provincial, and local laws and regulations. Incineration is the preferred method. Relatively small quantities of product may be neutralized as stated above, and if in accordance with local laws and the operators of the local sewage treatment plant, the neutralized material may be discharged into the sewer system .

RCRA Hazard Class: D001

14. TRANSPORT INFORMATION

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

15. REGULATORY INFORMATION

International Inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL).

U.S. Regulations

EPA Reg. No. : 6836-237-70627

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65

STATE RIGHT TO KNOW

Ingredient	CAS#	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
1-bromo-3-chloro-5,5-	16079-88-2	-	-	-	-	-	-
dimethylhydantoin							

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Dichloro dimethyl hydantoin	118-52-5	Listed	-	Listed	Listed	Listed	-
1,3-dichloro-5-ethyl-5-	89415-87-2	-	-	-	-	-	-
methylhydantoin							

CERCLA / SARA

Ingredient	CAS#	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
1-bromo-3-chloro-5,5-	16079-88-2	60 - 70%	100 lb	N/A	None
dimethylhydantoin					

CAA HAP/CAA ODS/CWA Priority Pollutants: None

Immediate: Yes Fire: Yes

Canada

WHMIS hazard class: Non-controlled.

16. OTHER INFORMATION

Reason for revision:
Prepared by:
Additional advice:
None
Not applicable
NAPRAC
None

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