
MATERIAL SAFETY DATA SHEET

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Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

B.I.O. BLAST 650**MSDS ID: 00296**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: B.I.O. BLAST 650
Product Descriptor: PAPER MILL BIOCIDES
MANUFACTURER: JOHNSON DIVERSEY, INC. EMERGENCY PHONE NUMBER: (800) 851-7145
3630 E. KEMPER ROAD
CINCINNATI, OH. 45241

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
1-BROMO-3-CHLORO-5,5-DIMETHYLHYDANTOIN (126-06-7)		>30%	None established	
1,3-DICHLORO-5 ETHYL-5 METHYLHYDANTOIN (89415-87-2)		5 - 15%	None established	
1,3-DICHLORO-5,5 DIMETHYLHYDANTOIN (118-52-5)		15 - 30%	PEL:0.2 STEL:0.4 TLV:0.2	MG/M3 MG/M3 MG/M3

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
CORROSIVE MATERIAL - Causes severe burns to skin and eyes. Harmful if swallowed. Do not contact eyes, skin or clothing. Avoid breathing any dust, spray mist or vapors in spill area. Wash thoroughly after handling product. Wear eye protection, clothing and footwear to prevent skin contact.
POSSIBLE ROUTES OF ENTRY: Skin contact/absorption and inhalation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE: EYES: Burns or severe irritation with pain, redness and swelling.
SKIN: Severe irritation or burns with rash, redness, pain or itching. INGESTION: If swallowed, pain, nausea and vomiting may result. INHALATION: Dust causes burns or severe irritation to nose, throat, and respiratory tract with pain, choking, and breathing difficulty.

CHRONIC: Same as acute effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Dermatitis, sensitive skin, pulmonary function and asthma.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes, skin and respiratory tract.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention.
SKIN: Flush thoroughly with plenty of water. Wash with mild soap and water. Remove contaminated clothes and shoes and clean before reuse. Get medical attention for any painful, red or injured skin.

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IV. FIRST AID MEASURES (Cont.)

INGESTION: If swallowed, rinse mouth with water. Dilute by drinking several glasses of water. DO NOT induce vomiting. If patient vomits, rerinse mouth. Get immediate medical attention. NOTE: Never give fluids by mouth to an unconscious person.

INHALATION: If inhaled, move to fresh air. If patient is not breathing, give artificial respiration. If breathing is difficult, give oxygen under the direction of trained personnel or a physician. Get immediate medical attention.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): NONE **FLAME EXTENSION:** N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: NONE UEL: NONE
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Oxidizing product may cause fire or spontaneous combustion if contaminated with oil, paper, wood or other combustibles. Toxic fumes or vapor may form during fire. Accumulation of dust may cause an explosion hazard.
EXTINGUISHING MEDIA: Water, water spray, CO2, foam or dry powder.
FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus (SCBA) in fire area.
SPECIAL INSTRUCTIONS: Product is an oxidizer. Flood with water.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:
Avoid contact with organic materials. Contain spilled solids. Wear protective clothing. Sweep or shovel solids or powder into a non-reactive chemical waste container. Dispose of materials in accordance with local, State and Federal regulations. Flush spill area with water. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office of Guidance. Oxidizing material, do not allow to dry on material which may burn.
This product does not contain a reportable quantity (RQ) under CERCLA.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Store in a cool, dry place away from all organic material. Product is a strong oxidizer and is corrosive. Avoid heat and direct sunlight. Do not allow product to come in contact with oxidizable material. Keep container closed.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Safety glasses with side shields. Chemical goggles if contact or splash hazard exists. Face shields.
PROTECTIVE GLOVES: Liquid proof rubber or neoprene gloves. Avoid cotton, wool and leather.

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

OTHER PROTECTIVE CLOTHING/EQUIPMENT: Eyewash and safety shower in area if contact or splash hazard exists. Long sleeved shirt and clothing to cover exposed skin if contact hazard exists.

ENGINEERING CONTROLS:

VENTILATION: Good general ventilation should be sufficient to control airborne levels.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Off-white briquettes.

BOILING POINT (DEG F): N/A

FREEZING POINT: N/A

SPECIFIC GRAVITY/BULK DENSITY: 1.000

pH: N/A

pH 1% SOLUTION: 3.6

VOLATILE BY VOLUME: 0

SOLUBILITY IN WATER: Partially Soluble

VAPOR PRESSURE(mmHg): N/A at N/A

VAPOR DENSITY: NONE

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY WITH OTHER MATERIALS: Acids; Oxidizing agents; High storage temperatures; Organic materials

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; hydrogen chloride, chlorine and chlorinated compounds; hydrogen bromide and/or bromine; oxides of carbon; oxides of nitrogen

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL TESTING: Available toxicology test data for the product as listed below.

TOXICITY TEST DATA:

B.I.O. BLAST 650:

Acute oral LD50 (rat) 468 mg/kg

Eye Irritancy (rabbit) severely irritating and corrosive

Skin Irritancy (rabbit) corrosive

Not corrosive to skin according to US DOT test

Respiratory Irritancy severely irritating upon inhalation, with potential skin absorption and tissue damage

1,3-Dichloro-5,5-dimethylhydantoin:

Skin Sensitization (rabbit) skin sensitizer

XII. ECOLOGICAL INFORMATION

Available toxicology test data for the product as listed below.

ECOTOXICITY TEST DATA:

B.I.O. BLAST 650:

LC50 (96 hr.) Onchohynchus mykiss 0.5 mg/l

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XII. ECOLOGICAL INFORMATION (Cont.)

LC50 (96 hr.)	Lepomis macrochirus	1.2 mg/l
LC50 (48 hr.)	Daphnia magna	0.4 mg/l
LC50 (96 hr.)	Mysid shrimp	0.93 mg/l

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: PRODUCT IS CONSIDERED D001-IGNITEABLE, IF DECLARED HAZARDOUS WASTE.

PESTICIDE WASTES ARE TOXIC. Improper disposal of excess pesticide or 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. DO NOT contaminate water, food or feed by storage or disposal or cleaning of equipment. Dispose of unused, uncontaminated product in compliance with local, state and federal regulations.

XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA: All ingredients in this product are on TSCA inventory.

HAPS: NONE

VOC CONTENT (EPA Method 24A): % VOC: 0 Lb/Gal VOC: 0

CERCLA/EPCRA:

Section 313 Toxic Chemicals:

NONE

SARA Section 311/312:

ACUTE:YES CHRONIC:NO FIRE:YES REACTIVITY:YES

SUDDEN RELEASE OF PRESSURE:NO

LISTED CARCINOGEN: NONE

NTP: NO IARC: NO OSHA: NO

HMIS RATINGS: HEALTH: 3 FIRE: 1 REACTIVITY: 1

PERSONAL PROTECTIVE EQUIPMENT: D

NFPA RATING: HEALTH: 3 FIRE: 1 REACTIVITY:1 SPECIAL:OX

STATE RIGHT-TO-KNOW INFORMATION:

1-BROMO-3 CHLORO-5,5-DIMETHYLHYDANTOIN - CAS #126-06-7

1,3-DICHLORO-5,5-DIMETHYLHYDANTOIN - CAS #118-52-5

1,3-DICHLORO-5-ETHYL-5-METHYLHYDANTOIN - CAS 89415-87-2

CALIFORNIA PROPOSITION 65:

Bromoform (CAS# 75-25-2) @ 12 ppm

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XVI. OTHER INFORMATION

Disclaimer: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other materials or in a process. It is the user's responsibility to evaluate the handling, and use.