



VERICHEM

MATERIAL SAFETY DATA SHEET

VERICIDE BRONOPOL SOLUTION

DATE: 08/21/2006

CAS NO: 52-51-7
SUPERSEDES: 03/06/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VERICIDE BRONOPOL SOLUTION
SYNONYMS: Bronopol Solution
CHEMICAL FAMILY: Not Applicable
MOLECULAR FORMULA: Mixture
MOLECULAR WEIGHT: Not Applicable

VERICHEM, 3499 Grand Avenue, Pittsburgh, PA 15225 (412-331-7299, 8:30 am to 5:00 pm)

EMERGENCY PHONE: For any emergency involving spill, leak, fire, exposure, or accident call CHEMTREC: 1-800-424-9300. Outside the USA and Canada call: 703-527-3887.

2. COMPOSITION/INFORMATION ON INGREDIENTS

REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
2-Bromo-2-Nitro-1,3-Propanediol	52-51-7	10.0	Not Established	PEL/TLV
1,2-Propanediol	57-55-6	10.0	Not Established	PEL/TLV
Water	7732-18-5	80.0	Not Established	PEL/TLV

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR: Colorless to Light Yellow Liquid

EFFECTS OF OVEREXPOSURE: HUMAN: Eye contact causes irritation. Dermal contact causes irritation. This material is toxic by ingestion. Inhalation or aspiration of the liquid into the lungs may result in chemical pneumonitis. Excessive inhalation overexposure could result in CNS depression, headache, dizziness, incoordination, nausea and loss of appetite. ENVIRONMENTAL: This product is toxic to fish.

4. FIRST AID MEASURES (IN CASE OF CONTACT)

IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Get medical attention. Remove contact lenses, if present, after the first 5 minute, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have a 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. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. **FIRE FIGHTING MEASURES**

FLAMMABLE PROPERTIES

FLASH POINT: Not Available

FLAMMABLE LIMITS (% BY VOLUME):..... Not Available

AUTOIGNITION TEMPERATURE:..... Not Available

DECOMPOSITION TEMPERATURE: 140° C

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION

Use water fog, water, waterspray, foam, CO₂ or dry chemical extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turn out gear. If product is heated above 140° C, the solid or solid residue from solutions decomposes exothermically, liberating toxic hydrogen bromide fumes and oxides of nitrogen, and wells up to give a tarry mass which burns readily.

If fire cannot be controlled and containers are heated, EVACUATE THE AREA!

6. **ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices.
- See Section 8 for PPE recommendation.
- Dyke area to contain spill.
- Soak up pooled liquid with a suitable absorbent such as clay, sawdust kitty litter or fuller's earth. Sweep up the absorbed material and place into an appropriate chemical waste container for disposal. Generously cover contaminated area with slurry of common, powdered household laundry detergent and water. Using a stiff brush, work the slurry into cracks and crevices. Allow to stand for 2-3 minutes then flush with water. Repeat if necessary.
- Do not discharge unless in accordance with Federal, State and Local Regulations.

7. **HANDLING AND STORAGE**

Storage Requirements: Store away from incompatible materials. Store in original container separate from other pesticides, fertilizers, food and feed. Store in a cool dry place. Keep containers tightly closed when not in use.

8. **PERSONAL PROTECTION**

EYE PROTECTION REQUIREMENTS: Chemical goggles or side-shield safety glasses.

SKIN PROTECTION REQUIREMENTS: Gloves, coveralls, apron, and boots as necessary to prevent contact.

VENTILATION REQUIREMENTS: Use local exhaust to control dusts. Mechanical may be adequate.

RESPIRATOR REQUIREMENTS: If dusts are generated, wear an approved dust respirator.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR:.....Colorless to light yellow liquid with a characteristic odor

BOILING POINT: ~100

EVAPORATION RATE: N/A

MELTING POINT: N/A

PERCENT VOLATILE (BY WEIGHT): 80

pH: 2.0 to 6.0

SATURATION IN AIR (PERCENT BY VOLUME): N/A

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY: VAPOR DENSITY: 1.06

VAPOR PRESSURE: N/A

10. **STABILITY AND REACTIVITY**

STABILITY/THERMAL (CONDITIONS TO AVOID): Stable Avoid Alkalies and Heat

HAZARDOUS DECOMPOSITION PRODUCTS: Formaldehyde, bromine, oxides of carbon, oxides of nitrogen

REACTIVITY: Incompatibilities: Amines, Metals, Strong Alkali. Hazardous polymerization will not occur. Corrosive to metal. Not an oxidizer.

11. **TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS

ORAL:Oral LD₅₀ (Rat) 254 mg/kg
DERMAL:Dermal LD₅₀ (Rat) 1600 mg/kg
INHALATION:N/A
EYE IRRITATION:Irritating (Rabbit)
SENSITIZATION:Sensitizer
SKIN IRRITATION:Irritating (Rabbit)

12. **ECOLOGICAL INFORMATION**

BLUEGILL:N/A
FATHEAD MINNOW:N/A
RAINBOW TROUT:Static 96 hr LC₅₀ – 41.2 mg/L
WILDLIFE: N/A

13. **DISPOSAL CONSIDERATION**

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If waste 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: Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.

WASTE DISPOSAL: Incinerate (assure that emissions comply with applicable regulations) or bury in a licensed facility in compliance with Federal, State, and Local Solid Waste Regulations. Do not discharge into waterways or sewer systems.

14. **TRANSPORT INFORMATION**

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

	DOT Shipping Information	IMO Shipping Information	ICAO/IATA	TRANSPORT CANADA
Shipping Name	Corrosive Liquid, Acidic, Organic, N.O.S. (Bronopol)		Corrosive Liquid, Acidic, Organic, N.O.S. (Bronopol)	Corrosive Liquid, Acidic, Organic, N.O.S. (Bronopol)
Hazard Class	8		8	8
Packing Group	III		III	III
Subsidiary Class				
UN/ID Number	UN3265		UN3265	UN3265
Transport Label Required	Yes		Yes	Yes
Packing Instructions Passenger Cargo				
Max. Net Quantity Passenger Cargo				
D.O.T. Hazardous Substances				
IMDG Page				

15. **REGULATORY INFORMATION**

INVENTORY INFORMATION

US TSCA: Yes
CANADA DSL: Yes
EEC EINECS: Yes

16. **OTHER INFORMATION**

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE: 1
HEALTH: 3
REACTIVITY: 1

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