

# SAFETY DATA SHEET

## ETHIDIUM BROMIDE, solution, 10mg/ml

### SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**  
**5480 Mainway**  
**Burlington, Ontario L7L 6A4**  
**1-800-234-1179**  
**Emergency Telephone No.: CANUTEC 1-613-996-6666**  
**Chemical Name:** Ethidium bromide, solution, 10mg/ml  
**Catalog Number:** ETB444

#### Potential Health Effects

**Routes of entry:** Eyes, skin, inhalation, ingestion.

**Target Organs:**, reproductive system

**Eyes:** Toxic when in contact with eyes. Harmful. Causes irritation.

**Skin:** Toxic when in contact with skin. Readily absorbed through skin. harmful.

**Ingestion:** Harmful if ingested.

**Inhalation:** Fatal if inhaled.

**CHRONIC HEALTH HAZARDS;** repeated exposure may cause dermatitis. May cause cancer. May cause CNS disturbances.

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Classification

#### CLASSIFICATION:

Acute toxicity Oral,(category 3)  
Acute toxicity Inhalation,(category 4)  
Germ cell mutagenicity, (category2)

#### PICTOGRAM:



**SIGNAL WORD:** Danger

#### HAZARD STATEMENTS:

H302 Harmful if swallowed.  
H330 Fatal if inhaled.  
H341 Suspected of causing genetic defects.

#### PRECAUTIONARY STATEMENTS:

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
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P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P284 Wear respiratory protection.  
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
Rinse mouth.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

### SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	RTECS	%
Ethidium Bromide	1239-45-8	SF7950000	1
Water:	7732-18-5		99

#### Ethidium bromide

**Molecular Formula:** C<sub>12</sub>H<sub>20</sub>BrN<sub>3</sub>

**Molecular Weight:** 394.6

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with water , GET MEDICAL ATTENTION

**Skin:** In case of contact, flush area immediately with water. Remove clothing. GET MEDICAL ATTENTION.

**Inhalation:** Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen and GET MEDICAL ATTENTION.

**Ingestion:** wash mouth with water. Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.

### SECTION 5 FIRE FIGHTING MEASURES

**Combustible solid. When dealing with fire wear self-contained breathing apparatus. Avoid hazardous vapors and dust.**

**Flammable:** No

**Flash Point:** N/A

**Autoignition Temperature:** n/a

**Extinguishing Media:** Use water spray, foam, dry chemical or carbon dioxide.

**Explosion Data:** Not available

### SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

**Leak and Spill Procedures:** Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

### SECTION 7 HANDLING AND STORAGE

**Handling:** Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Mini-

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mize dust generation. Use in fume hood.

**Storage Conditions:** Room temperature. Keep away from heat (above 50C) and ignition source.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**

ACGIH: no information found

NIOSH: no information found /m3 IDLH

OSHA: no information found

Use adequate ventilation. AVOID DUST GENERATION.

Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

**Personal Protection:** Lab coat, safety goggles, rubber gloves.

**Ventilation:** Local exhaust systems. Use fume hood

**Respiratory protection:** use NIOSH/MSHA approved respirator.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid

**Appearance and Odor:** red color

**Melting Point:** N/A

**Boiling Point:** N/A

**Specific Gravity:** N/A

**Vapor Density:** N/A

**Solubility:** N/A

**pH:** N/A

### SECTION 10 STABILITY AND REACTIVITY:

**Conditions to avoid:** spillage

**Stability:** Stable at normal room temperature and pressure. May polymerize if heated to the melting point. May polymerize on exposure to light. May form explosive dust –air mixtures.

**Incompatibility:** Metals, oxidizing agents, reducing agents, bases, and acids

**Hazardous Decomposition Products:** Thermal decomposition may produce toxic fumes of carbon monoxide and carbon dioxide, bromine gas.

**Hazardous Polymerization:** no information found

### SECTION 11 TOXICOLOGICAL PROPERTIES

**Exposure Limits:**

LD50 / LC50:

Ethidium bromide

ORL-RAT LD50:1000-2000 MG/KG

IPR-RAT LD50:16 MG/KG

INHALATION-RAT LD50:0.015 MG/KG

ORL MUS LD50:107MG/KG

**Teratogenicity:** no information found **Epidemiology:** no information found

**Reproductive Effects:** have occurred in experimental animals

**Neurotoxicity:** no information found

**Mutagenicity:** in vitro tests have shown mutagenic effects.

**Carcinogenicity:** no information found

NTP: no information found

IARC: no information found

### SECTION 12 ECOLOGICAL INFORMATION

No information found.

### SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal:** Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

### SECTION 14 TRANSPORT INFORMATION

**Shipping Information:**

**TDG (Canada)**

UN number: 2811 Class: 6.1 Packing group: I

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S.

**IMDG**

UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide)

**IATA**

UN number: 2811 Class: 6.1 Packing group: I

Proper shipping name: Toxic solid, organic, n.o.s. (3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide)

IATA Passenger: Not permitted for transport

### SECTION 15 REGULATORY INFORMATION

**US :** TSCA: listed

**European/International:**

**Canada:** WHMIS: D1B, D2A

Listed on DSI list. Controlled product.

Listed on the Canadian Ingredient Disclosure list.

### SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz (President)

Date Prepared: Jan 1/2025

Phone: (800) 234-1179

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