

# SAFETY DATA SHEET

## ETHIDIUM BROMIDE

### 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  
Catalog Number: ETB333  
For research purposes

#### 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, (category 2)

#### 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	99+

**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. Minimize dust generation. Use in fume hood.

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

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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:** Solid, red color

**Appearance and Odor:** powder

**Melting Point:** 260 – 262°C

**Boiling Point:** N/A

**Specific Gravity:** N/A

**Vapor Density:** N/A

**Solubility:** Soluble in water

**pH:** N/A

### SECTION 10 STABILITY AND REACTIVITY:

**Conditions to avoid:** dust generation

**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:

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: Dec 29/2021

Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.

Observe all federal, provincial and state laws concerning health, safety and pollution.