# 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

## 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.

**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.

# 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.

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## 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: Aug 22/2019 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.