

Material Safety Data Sheet

Printing date 01/17/2008

Reviewed on 01/17/2008

1 Identification of substance:· **Product details:**

- **Trade name:** Ethidium Bromide Tablets
- **Catalog or product number:** 1610430, 1610430EDU
- **Application of the substance / the preparation** Laboratory chemicals

· **Manufacturer/Supplier:**

Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547

(510)741-1000

- **Information department:** Technical services, customer support.

· **Emergency information:**

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.
510-741-1000

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

2 Composition/Information on components:· **Chemical characterization**

- **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Listing of dangerous and non-hazardous components:**

CAS: 1239-45-8	3,8-diamino-1-ethyl-6-phenylphenantridiniumbromide	T+, Xi; R 21/22-26-36/37/38	0.1-1.0%
EINECS: 214-984-6			

3 Hazards identification· **Emergency overview:**

Toxic by inhalation.

T Toxic

- **Routes of exposure:** Inhalation

· **Information pertaining to particular dangers for man and environment**

R 23 Toxic by inhalation.

R 40 Limited evidence of a carcinogenic effect.

· **Classification system**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

4 First aid measures· **General information**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing** Induce vomiting and call for medical help.

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- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:**
Mount respiratory protective device.
Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of dust.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form: Solid.
Color: Whitish
Odor: Odorless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

· **Organic solvents:** 0.0 %

· **Solids content:** 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

Toxic

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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· **Target organs:** Respiratory tract.

12 Ecological information:

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **DOT regulations:**

- **Hazard class:** 6.1
- **Identification number:** UN2811
- **Packing group:** III
- **Proper shipping name (technical name):** TOXIC SOLID, ORGANIC, N.O.S. (Ethidium Bromide)
- **Label:** 6.1

· **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 6.1 Toxic substances
- **Danger code (Kemler):** 60
- **UN-Number:** 2811
- **Packing group:** III
- **Label:** 6.1
- **Description of goods:** 2811 TOXIC SOLID, ORGANIC, N.O.S. (3,8-diamino-1-ethyl-6-phenylphenantridiniumbromide)

· **Maritime transport IMDG:**

- **IMDG Class:** 6.1
- **UN Number:** 2811
- **Label:** 6.1
- **Packing group:** III
- **EMS Number:** F-A,S-A
- **Marine pollutant:** No
- **Proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S. (3,8-diamino-1-ethyl-6-phenylphenantridiniumbromide)

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 6.1
- **UN/ID Number:** 2811
- **Label:** 6.1
- **Packing group:** III

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15 Regulations

· **SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

· **Section 313 (40CFR372.65):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

None of the ingredients is listed.

· **Carcinogenity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· **Code letter and hazard designation of product:**

T Toxic

· **Hazard-determining components of labelling:**

3,8-diamino-1-ethyl-6-phenylphenantridinumbromide

· **Risk phrases:**

23 Toxic by inhalation.

40 Limited evidence of a carcinogenic effect.

· **Safety phrases:**

4 Keep away from living quarters.

9 Keep container in a well-ventilated place.

20 When using do not eat or drink.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately.

60 This material and its container must be disposed of as hazardous waste.

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- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Environmental Health and Safety.
- **Contact:**
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
- *** Data compared to the previous version altered.**