



1121 5th Street NW
Washington, DC 20001
www.edvotek.com

Safety Data Sheet

Version 3
Revision Date 05/14/2025

PRODUCT AND COMPANY IDENTIFICATION

Product name: **Ethidium Bromide**

Product Number: 2000, 2002, 20005

Brand: Edvotek

Supplier: Edvotek

1121 5th Street NW

Washington, DC 20001

Telephone: 1-800-338-6835
or 202-370-1500

Fax: 202-370-1501

Emergency Phone # (For both supplier
and Manufacturer):
202-370-1500

HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

Acute toxicity, Oral (Category 4)

Acute toxicity, Inhalation (Category 2)

Germ Cell mutagenicity (Category 2)

Skin irritant (Category 2)

Signal word

Danger

Pictograms



Hazard statement(s)

H302 Harmful if swallowed.

H330 Fatal if inhaled.

H341 Suspected of causing genetic defects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P281 Use personal protective equipment as required.

P310

Immediately call a POISON CENTER
or doctor/ physician

OSHA Hazards

Highly toxic by inhalation, Harmful by
ingestion, Mutagen

HMIS Classification:

Health hazard: 3

Flammability: 0

Physical hazard: 0

NFPA Rating:

Health hazard: 4

Fire: 0

Reactivity Hazard: 0

Potential Health Effects:

Inhalation May be harmful if inhaled.

May cause respiratory tract irritation.

Skin- May be harmful if absorbed
through skin. May cause skin irritation.

Eyes- May cause eye irritation.

Ingestion- Harmful if swallowed.

COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms:** EtBr

3,8-Diamino-5-ethyl-6-phenylphenanthridinium bromide

Homidium bromide

Formula: $C_{21}H_{20}BrN_3$

Molecular Weight: 394.31 g/mol

| Chemical name | EC No. | CAS -No | Concentration |
|--|-----------|-----------|---------------|
| 3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide | 214-984-6 | 1239-45-8 | < 25 ng/ul |

FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if

FIREFIGHTING MEASURES**Conditions of flammability**

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

symptoms develop.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Emits toxic fumes.

ACCIDENTAL RELEASE MEASURES**Personal precautions**

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Incompatible storage

Strong oxidizing agent

Conditions for safe storage

Keep in the dark in a dry and well-ventilated place.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form chemical bound to paper
Colour no color

Safety data

| | |
|---|-------------------|
| pH | 4.0-7.0 |
| Melting point/freezing point | no data available |
| Boiling point | no data available |
| Flash point | no data available |
| Ignition temperature | no data available |
| Autoignition Temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Vapour pressure | no data available |
| Density | no data available |
| Water solubility | no data available |
| Partition coefficient: n-octanol/water | no data available |
| Relative vapour Density | no data available |
| Odour | no data available |
| Odour Threshold | no data available |
| Evaporation rate | no data available |

STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

No further relevant data available.

Possibility of hazardous reactions

No further relevant data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Carbon

oxides, nitrogen oxides (NO_x), Hydrogen bromide gas.

TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50

Oral-rat-1,503 -2,177 mg/kg

Inhalation LC50

LC50

Inhalation-rat-1 h-11.8 -134 mg/l

Dermal LD50

no data available

no data available

Reproductive toxicity

no data available

Teratogenicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

In vitro tests showed mutagenic effects

Aspiration hazard

no data available

Synergistic effects

no data available

ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

no data available

Mobility in soil**Other adverse effects**

no data available

PBT and vPvB assessment

no data available

DISPOSAL CONSIDERATIONS**Product**

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

TRANSPORT INFORMATION**DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

REGULATORY INFORMATION**OSHA Hazards**

Highly toxic by inhalation, Harmful by ingestion. Mutagen

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard.

OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

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