

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 25.08.2007

Revision: 25.08.2007

1 Identification of substance:

· **Product details:**

· **Trade name:** Ethidium Bromide

· **Article number:** 4007

· **Application of the substance / the preparation**

Chemicals for synthesis

Laboratory chemicals

· **Manufacturer/Supplier:**

Mallinckrodt Baker B.V

P.O.Box 1

7400 AA Deventer

The Netherlands

· **Informing department:**

Quality Systems & Regulatory Affairs

E-mail : sjors.duteweert@covidien.com

· **Emergency information:**

Environment Health & Safety department

during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

Tel(+31)(0) 570-687500

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E-mail : jtbaker.nl@covidien.com

2 Hazards identification

· **Hazard designation:**



T+ Very toxic

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

R 21/22 Harmful in contact with skin and if swallowed.

R 26 Very toxic by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin.

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Designation:**

1239-45-8 Ethidium Bromide

· **Identification number(s):**

· **EINECS Number:** 214-984-6

4 First aid measures

· **General information**

Instantly remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after soiled clothing has 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 bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

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- **After swallowing**
Rinse out mouth
Instantly call for doctor.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** Put on breathing apparatus.

* **6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Dispose of 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 container with care.
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep breathing equipment ready.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Protection of hands:**
Protective gloves.

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **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:** Tightly sealed safety glasses.

9 Physical and chemical properties:

· **General Information**

| | |
|----------------|----------------|
| Form: | Solid. |
| Colour: | White |
| | Dark red |
| Smell: | Characteristic |

· **Change in condition**

Melting point/Melting range: 261-264°C
Boiling point/Boiling range: Not determined
· **Flash point:** -23°C

· **Inflammability (solid, gaseous)** Product is not inflammable.

· **Danger of explosion:** Product is not explosive.

· **Density at 20°C** 1.01 g/cm³

· **Solubility in / Miscibility with** Soluble in water.

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** Heat,boiling teperatures.

· **Materials to be avoided:**

· **Dangerous reactions** No dangerous reactions known

· **Dangerous products of composition:** Bromine compounds

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** Irritant for skin and mucous membranes.

· **on the eye:** Irritant effect.

· **Sensitization:** No sensitizing effect known.

12 Ecological information:

· **General notes:**

Water hazard class (D) 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

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Danger to drinking water if even small quantities leak into soil.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

*** 14 Transport information**

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class:** 6.1 Toxic substances.
- **Kemler Number:** 66
- **UN-Number:** 2811
- **Packaging group:** I
- **Label** 6.1
- **Designation of goods:** 2811 TOXIC SOLID, ORGANIC, N.O.S. (Ethidium Bromide)
- **Limited quantities (LQ)** LQ0
- **Transport category** 1
- **Tunnel restriction code** E

· **Maritime transport IMDG/GGVSea:**



- **IMDG/GGVSea Class:** 6.1
- **UN Number:** 2811
- **Label** 6.1
- **Packaging group:** I
- **Correct technical name:** TOXIC SOLID, ORGANIC, N.O.S. (Ethidium Bromide)

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

- **ICAO/IATA Class:** 6.1
- **UN/ID Number:** 2811
- **Packaging group:** I
- **Correct technical name:** TOXIC SOLID, ORGANIC, N.O.S. (Ethidium Bromide)

*** 15 Regulatory information**

- **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

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

T+ Very toxic

· **Risk phrases:**

21/22 Harmful in contact with skin and if swallowed.

26 Very toxic by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

· **Safety phrases:**

22 Do not breathe dust.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:** Quality Assurance Department

· **Contact:** Sjors duteweert

· *** Data compared to the previous version altered.**