

# Safety data sheet

## according to 1907/2006/EC, Article 31





Printing date 01.11.2012

Revision: 01.11.2012

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Ethidium bromide Powder
- **Article number:** 30-31-10
- **CAS Number:**  
1239-45-8
- **EC number:**  
214-984-6
- **Index number:**  
612-278-00-6
- **Registration number**  
A registration number is not available for this substance because the annual tonnage is less than that required for registration or the registration date is envisaged for a later registration deadline.
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** Laboratory reagent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Severn Biotech Ltd.  
Unit 2,  
Park Lane,  
Kidderminster,  
Worcestershire.  
DY11 6TJ  
UK  
Tel: 0044 1562 825286  
Fax: 0044 1562 825284  
email: info@severnbiotech.com
- **Further information obtainable from:** Product safety department.
- **Emergency telephone number:** Tel: 0044 1562 825286 (not 24 hours)

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
- 
 GHS06 skull and crossbones  
 Acute Tox. 2 H330 Fatal if inhaled.
- 
 GHS08 health hazard  
 Muta. 2 H341 Suspected of causing genetic defects.
- 
 GHS07  
 Acute Tox. 4 H302 Harmful if swallowed.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
- 
 T+; Very toxic  
 R26: Very toxic by inhalation.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 1)



Xn; Harmful

R22-68: Harmful if swallowed. Possible risk of irreversible effects.

Muta. Cat. 3

· **Information concerning particular hazards for human and environment:** Not applicable.

· **Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms** GHS06, GHS08

· **Signal word** Danger

· **Hazard statements**

H302 Harmful if swallowed.

H330 Fatal if inhaled.

H341 Suspected of causing genetic defects.

· **Precautionary statements**

P260 Do not breathe dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

1239-45-8 Ethidium bromide

· **Identification number(s)**

· **EC number:** 214-984-6

· **Index number:** 612-278-00-6

### 4 First aid measures

· **Description of first aid measures**

· **General information:**

Immediately 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.

· **After inhalation:**

DO NOT DELAY!

Supply fresh air or oxygen; call for doctor.

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

Call a doctor immediately.

Do not use mouth to mouth artificial respiration - use an Ambu Bag.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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

(Contd. on page 3)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 2)

- **After swallowing:**  
Wash mouth out with water  
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:** Treat symptomatically and supportively.
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
HBr

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

- **Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Avoid formation of dust.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
Keep ignition sources away - no smoking.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Pick up mechanically.  
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Prevent formation of dust.

(Contd. on page 4)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 3)

- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Avoid direct contact (skin contact, ingestion and/or inhalation of fume/mist/dust) with the product.
- **Information about fire - and explosion protection:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
  - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
  - **Information about storage in one common storage facility:**
    - Store away from foodstuffs.
    - Store away from oxidizing agents.
  - **Further information about storage conditions:**
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
    - Store in a banded area.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - Select PPE appropriate for the operations taking place taking into account the product properties.
- **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.
  - Avoid contact with the eyes and skin.
  - Do not eat, drink, smoke or sniff while working.
  - Do not breath dust
  - A safe system of work must be formulated and followed to ensure that workers who may be pregnant or breastfeeding do not come into direct contact with the product.
  - A safe system of work must be formulated and followed to ensure safe working with this product.
  - Relevant workers must receive suitable and sufficient training and supervision.
  - Ensure that eyewash stations and safety showers are close to the workstation location.
  - Area first aid kits should contain an Ambu Bag.
- **Respiratory protection:**
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 5)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 4)

**· 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 goggles

**· Body protection:** Protective work clothing

## 9 Physical and chemical properties

**· Information on basic physical and chemical properties**
**· General Information**
**· Appearance:**

<b>Form:</b>	Powder
<b>Colour:</b>	Red
<b>· Odour:</b>	Characteristic
<b>· Odour threshold:</b>	Not determined.

**· pH-value:** Not applicable.

**· Change in condition**

<b>Melting point/Melting range:</b>	261-264 °C
<b>Boiling point/Boiling range:</b>	Undetermined.

**· Flash point:** Not applicable.

**· Flammability (solid, gaseous):** Product is not flammable.

**· Ignition temperature:**
**Decomposition temperature:** Not determined.

**· Self-igniting:** Not determined.

**· Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures are possible.

**· Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**· Vapour pressure:** Not applicable.

<b>· Density:</b>	Not determined.
<b>· Relative density</b>	Not determined.
<b>· Vapour density</b>	Not applicable.
<b>· Evaporation rate</b>	Not applicable.

**· Solubility in / Miscibility with water:** Not determined.

**· Partition coefficient (n-octanol/water):** Not determined.

**· Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.

(Contd. on page 6)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 5)

· **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.  
As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.  
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong acids and oxidising agents
- **Hazardous decomposition products:**  
Hydrogen bromide  
Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Muta. 2

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** Product is not expected to bioaccumulate.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

GB

(Contd. on page 7)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 6)

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **European waste catalogue**

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- **Uncleaned packaging:**

- **Recommendation:**

Container remains hazardous when empty. Continue to observe all precautions.

Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**

- **ADR, IMDG, IATA** UN2811

- **UN proper shipping name**

- **ADR** 2811 TOXIC SOLID, ORGANIC, N.O.S. (Ethidium bromide)

- **IMDG, IATA** TOXIC SOLID, ORGANIC, N.O.S. (Ethidium bromide)

- **Transport hazard class(es)**

- **ADR**



- **Class** 6.1 Toxic substances.

- **Label** 6.1

- **IMDG, IATA**

- **Class** 6.1 Toxic substances.

- **Packing group**

- **ADR** I

- **Environmental hazards:**

- **Marine pollutant:** No

- **Special precautions for user** Warning: Toxic substances.

- **Danger code (Kemler):** 66

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Limited quantities (LQ)** LQ0

(Contd. on page 8)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.11.2012

Revision: 01.11.2012

**Trade name: Ethidium bromide Powder**

(Contd. of page 7)

· <b>Transport category</b>	1
· <b>Tunnel restriction code</b>	C/E
· <b>UN "Model Regulation":</b>	UN2811, TOXIC SOLID, ORGANIC, N.O.S. (Ethidium bromide), 6.1, I

**15 Regulatory information**

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**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.

GB