

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

Printing date 28.11.2011

Version number 1

Revision: 11.04.2011

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

- **1.1. Product identifier**
- **Trade name:** 5-Bromo-2'-deoxyuridine
- **Article number:** 15240
- **CAS Number:**  
59-14-3
- **EC number:**  
200-415-9
- **1.2. Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Laboratory chemicals
- **1.3. Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4. Emergency telephone number:** +49 6131 19240 (university hospital Mainz)

**SERVA**  
Electrophoresis

## 2 Hazards identification

- **2.1. Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08

Carc. 2 H351 Suspected of causing cancer.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R40: 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.

- **2.2. Label elements**

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

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

- **Hazard pictograms** GHS08

- **Signal word** Warning

- **Hazard statements**

H351 Suspected of causing cancer.

- **Precautionary statements**

P201 Obtain special instructions before use.

P281 Use personal protective equipment as required.

P202 Do not handle until all safety precautions have been read and understood.

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

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3. Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

(Contd. on page 2)

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Revision: 11.04.2011

Trade name: 5-Bromo-2'-deoxyuridine

(Contd. of page 1)

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**  
59-14-3 Broxuridine
- **Identification number(s):**
- **EC number:** 200-415-9
- **Description:**
- **Empirical formula:** C<sub>9</sub>H<sub>11</sub>BrN<sub>2</sub>O<sub>5</sub>
- **MW:** 307,10

### 4 First aid measures

- **4.1. Description of first aid measures**
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.
- **Information for doctor**
- **4.2. Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3. Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2. Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen bromide (HBr)  
Carbon monoxide and carbon dioxide
- **5.3. Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2. Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3. Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **6.4. Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

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(Contd. on page 3)

**Safety data sheet**  
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Version number 1

Revision: 11.04.2011

Trade name: 5-Bromo-2'-deoxyuridine

(Contd. of page 2)

## 7 Handling and storage

- **Handling**
- **7.1. Precautions for safe handling**  
Prevent formation of dust.  
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage**  
**Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **7.3. Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1. Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2. Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:**  
Short term filter device:  
Filter P2.
- **Protection of hands:**  
Protective gloves.  
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.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Natural rubber, NR  
Nitrile rubber, NBR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

- **9.1. Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**  
**Form:** Powder

(Contd. on page 4)

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

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Version number 1

Revision: 11.04.2011

Trade name: 5-Bromo-2'-deoxyuridine

(Contd. of page 3)

- |   |   |
|---|---|
| <b>Colour:</b>                            | White   |
| <b>· Odour:</b>                           | Odourless                                     |
| <b>· Change in condition</b>              |   |
| <b>Melting point/Melting range:</b>       | 181 - 188°C                                   |
| <b>Boiling point/Boiling range:</b>       | undetermined                                  |
| <b>· Flash point:</b>                     | Not applicable                                |
| <b>· Flammability (solid, gaseous)</b>    | Product is not flammable.                     |
| <b>· Danger of explosion:</b>             | Product does not present an explosion hazard. |
| <b>· Density:</b>                         | Not determined                                |
| <b>· Solubility in / Miscibility with</b> |   |
| <b>Water at 20°C:</b>                     | 17 g/l  |
| <b>Organic solvents at 20°C:</b>          | 30 g/l (in Formamide)                         |
| <b>· 9.2. Other information</b>           | There are no more data available.             |

### 10 Stability and reactivity

- **10.1. Reactivity**
- **10.2. Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3. Possibility of hazardous reactions** No dangerous reactions known
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:** No further relevant information available.
- **10.6. Hazardous decomposition products:** No dangerous decomposition products known

### 11 Toxicological information

- **11.1. Information on toxicological effects**
  - **Acute toxicity:**
- |   |      |                  |
|---|------|------------------|
| <b>· LD/LC50 values that are relevant for classification:</b> |      |                  |
| Oral  | LD50 | 8400 mg/kg (rat) |
- **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)**
  - Carc. 2

### 12 Ecological information

- **12.1. Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **12.2. Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **12.3. Bioaccumulative potential** No further relevant information available.
- **12.4. 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.

(Contd. on page 5)

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Revision: 11.04.2011

Trade name: 5-Bromo-2'-deoxyuridine

(Contd. of page 4)

- **12.5. Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6. Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **13.1. Waste treatment methods**
- **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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |  |  |
|--|--|
| · <b>14.1. UN-Number</b>   |  |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>14.2. UN proper shipping name</b>   |  |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>14.3. Transport hazard class(es)</b>  |  |
| · <b>ADR, ADN, IMDG, IATA</b>  |  |
| · <b>Class</b>   | Void   |
| · <b>14.4. Packing group</b>   |  |
| · <b>ADR, IMDG, IATA</b>   | Void   |
| · <b>14.5. Environmental hazards:</b>  | Not applicable.                                      |
| · <b>14.6. Special precautions for user</b>  | Not applicable.                                      |
| · <b>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>   | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

### 15 Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2. 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.

- **Department issuing MSDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Abbreviations and acronyms:**  
PBT: persistent, bioaccumulative, toxic substance (REACH)  
vPvB: very persistent, very bioaccumulative substance (REACH)  
REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

(Contd. on page 6)

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**Trade name: 5-Bromo-2'-deoxyuridine**

(Contd. of page 5)

*CLP: Regulation on classification, labelling and packaging of substances and mixtures*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*ICAO: International Civil Aviation Organization*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

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

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