

SIGMA-ALDRICH

### Material Safety Data Sheet

Version 3.0  
Revision Date 06/26/2007  
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#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : **5-Bromo-2'-deoxyuridine**  
Product Number : B9285  
Brand : Sigma  
Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +18003255832  
Fax : +18003255052  
Emergency Phone # : (314) 776-6555

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 5-Bromo-1-(2-deoxy-beta-D-ribofuranosyl)uracil  
5-Bromouracil deoxyriboside  
Br-dU  
BUdR  
Formula : C9H11BrN2O5  
Molecular Weight : 307.11 g/mol

CAS-No.	EC-No.	Index-No.	Concentration [%]
59-14-3	200-415-9	-	-

#### 3. HAZARDS IDENTIFICATION

**Emergency Overview**  
**OSHA Hazards**  
Delayed target organ effects  
Reproductive hazard  
**Target Organs**  
Immune system.  
**HMS Classification**  
Health Hazard: 0  
Chronic Health Hazard: \*  
Flammability: 0  
Physical hazards: 0

**NFPA Rating**  
Health Hazard: 0  
Fire: 0

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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** : May be harmful if swallowed.

#### 4. FIRST AID MEASURES

**General advice**  
Move out of dangerous area.  
**If inhaled**  
If breathed in, move person into fresh air. If not breathing give artificial respiration.  
**In case of skin contact**  
Wash off with soap and plenty of water.  
**In case of eye contact**  
Flush eyes with water as a precaution.  
**If swallowed**  
Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

**Flammable properties**  
Flash point : no data available  
Ignition temperature : no data available  
**Suitable extinguishing media**  
Use water spray, alcohol-resilant foam, dry chemical or carbon dioxide.  
**Special protective equipment for fire-fighters**  
Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**  
Avoid dust formation.  
**Environmental precautions**  
Do not let product enter drains.  
**Methods for cleaning up**  
Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

**Handling**  
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.  
**Storage**  
Keep container tightly closed in a dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Safety glasses

#### Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form powder

Colour white

### Safety data

pH no data available

Melting point 190 °C (374 °F) - Decomposes on heating.

Boiling point no data available

Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility no data available

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

#### Hazardous decomposition products formed under fire conditions.

Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 8,400 mg/kg

### Irritation and corrosion

no data available

### Sensitisation

no data available

### Chronic exposure

Genotoxicity in vitro - rat - Embryo  
DNA damage

Genotoxicity in vivo - rat - Subcutaneous  
DNA inhibition

Laboratory experiments have shown mutagenic effects.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Target Organs</b>	Immune system.,

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

no data available

### Ecotoxicity effects

no data available

### Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

**15. REGULATORY INFORMATION**

**OSHA Hazards**

Delayed target organ effects, Reproductive hazard

**TSCA Status**

On TSCA Inventory

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

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

**SARA 313 Components**

SARA 313: 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**

Chronic Health Hazard

**Massachusetts Right To Know Components**

No Components Listed

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
Broxuridine	59-14-3	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
Broxuridine	59-14-3	

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION**

**Further information**

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