

BRDU

# Safety (MSDS) data for 5-bromo-2'-deoxyuridine

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## General

Synonyms: bromodeoxyuridine, 5-bromodeoxyuridine, 5-bromo-2-deoxyuridine, bromouracil deoxyriboside, broxuridine, BDU, 5-BDU, BRUDR, BUDR

Use: antineoplastic agent, antiviral drug

Molecular formula:  $C_9H_{11}BrN_2O_5$

CAS No: 59-14-3

EINECS No:

## Physical data

Appearance: white crystalline powder

Melting point: 185 - 186 C

Boiling point:

Vapour density:

Vapour pressure:

Density ( $g\ cm^{-3}$ ):

Flash point:

Explosion limits:

Autoignition temperature:

Water solubility: moderate

## Stability

Stable, but may be light sensitive. Incompatible with strong oxidizing agents.

## Toxicology

Experimental teratogen. May be harmful if swallowed, inhaled or absorbed through the skin.

### Toxicity data

(The meaning of any toxicological abbreviations which appear in this section is

given [here.](#))

ORL-RAT LD50 8400 mg kg<sup>-1</sup>

ORL-MUS LD50 9100 mg kg<sup>-1</sup>

IVN-MUS LD50 2320 mg kg<sup>-1</sup>

SCU-RAT LD50 3900 mg kg<sup>-1</sup>

IPR-MUS LD50 3050 mg kg<sup>-1</sup>

### **Risk phrases**

(The meaning of any risk phrases which appear in this section is given [here.](#))

## **Transport information**

(The meaning of any UN hazard codes which appear in this section is given [here.](#))

Non-hazardous for air, sea and road freight.

## **Personal protection**

Safety glasses.

### **Safety phrases**

(The meaning of any safety phrases which appear in this section is given [here.](#))

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This information was last updated on March 22, 2005. We have tried to make it as accurate and useful as possible, but can take no responsibility for its use, misuse, or accuracy. We have not verified this information, and cannot guarantee that it is up-to-date.

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# Chemotherapy Administration, Handling & Disposal

(SOP Modified from UWMC SOP)

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## INTRODUCTION:

Cancer chemotherapy drugs can cause mutagenesis, teratogenesis, carcinogenesis, and sterility when administered to humans. The risk varies with the specific drug and its concentration, and with the frequency and duration of exposure.

Concern has therefore been raised regarding potential hazards to personnel handling chemotherapy. Studies indicate that observing certain precautions while handling chemotherapy reduces personnel exposure and presumably risk.

All personnel working with chemotherapeutic agents must receive hazard awareness training regarding the agent.

## PRECAUTIONS FOR AGENT PREPARATION (reconstitution and dilution):

1. All agent preparation must be performed in a BSC, class II.
2. Wear chemotherapy gloves or double gloves of either surgical quality latex gloves or nitrile. Chemotherapy gloves provide the greatest protection.
3. Wear a protective gown that is lint-free, non-permeable with a solid front, long sleeves, and tight-fitting elastic or knit cuffs (gowns specifically designed for chemotherapeutic agents).
4. When double gloving, one glove should be placed under the gown cuff and one over.
5. The outer glove should be changed immediately if contaminated. Both gloves should be changed if the outer gloves is torn, punctured, or overtly contaminated with the drug (as in a spill) and every hour during preparation.
6. All potentially contaminated disposable items (gloves used in prep) must be placed in a plastic bag (while in the BSC) and then in the chemotherapy waste container. Sharps should be disposed of in a sharps container specific for chemotherapy. This sharp container must be labeled as holding chemotherapy items.
7. Preparations should be performed over plastic backed absorbent pads. Dispose of as noted above, immediately upon contamination.
8. External surfaces of syringes should be wiped with a clean alcohol pad to remove any potential contamination.
9. Chemotherapeutic agents must be stored in an area labeled chemotherapeutic agents.
10. Chemotherapeutic agents must be transported in ziplock bags with chemo labels.
11. Leurlock syringes are recommended.
12. A Chemotherapeutic agent spill kit must be available. These can be purchased from University Stores (3-1980) or Drug Services (598-6058). 70% isopropyl alcohol is an acceptable decontaminant for these agents.
13. The BSC should be cleaned (70% isopropyl alcohol) upon completion of tasks.
14. Hands must be washed upon completion of tasks.
15. Excess chemotherapeutic agent, not used, must be disposed of in chemotherapy waste container.
16. Chemotherapy gloves, gowns and stickers can be purchased at Drug Services (598-6058).
17. Consult with EHS Environmental Programs at 616-5836 (or 685-2848) for disposal needs.

### **PRECAUTION FOR AGENT ADMINISTRATION:**

1. Wear double gloves (latex or nitrile) for all procedures involving chemotherapy administration.
2. Change gloves after each use, tear, puncture, medication spill, or after 30 minutes of wear for latex, 60 minutes for nitrile.
3. Wear protective gown with solid front at all time.
4. For situations where potential eye contact with chemotherapeutic agent exists, safety goggle or face shield should be used.
5. Use leurolock needles, if possible.
6. Dispose all waste material in the appropriate chemical waste container.

### **CHEMOTHERAPY WASTE COLLECTION AND DISPOSAL:**

1. Obtain chemotherapy waste containers from Environmental Programs at 206-685-2848
2. Dispose all waste in a plastic bag and discarded in the chemical waste container
3. Seal filled chemical waste containers with the enclosed screw top
4. For pick-up: Complete a Chemical Collection Request Form and mail to Box 354400 or FAX to 206-685-2915

### **CLEANING CHEMOTHERAPY SPILLS**

1. Spills must be cleaned up immediately by properly protected trained personnel. Spills should be cleaned using contents in the spill kits. All other persons should leave the area.
2. Small spills (less than 5 ml) outside the BSC should be cleaned immediately by personnel wearing a gown, two pairs of gloves (latex or nitrile) and mask. For spills greater than 5ml, a respirator mask and eye protection should also be worn (found in the spill kits).
3. Liquids should be wiped with absorbent pads. The spill area should then be cleaned thoroughly with a detergent solution followed by clean water. Place waste in plastic bag and then in the chemotherapy waste container.
4. Spill kits for chemotherapeutic agents can be purchased through Drug Services (598-6058).

### **ACUTE EXPOSURE OF SPILLS**

1. In case of skin contact with an antineoplastic drug product, wash the affected area as soon as possible. Report incident to supervisor, complete Accident/Injury Report.
2. For eye exposure, the eye shall be flushed with copious amounts of water. The employee should then contact the Employee Health Clinic at 685-1026 or go to UWMC ER, if after hours.