


CHEMICAL SAFETY

Standard Operating Procedure (SOP)

Title:	5- Bromo-2'-deoxyuridine (BrdU)	<i>WFUHS</i>
Approved by: 	Effective Date:	SOP#
<i>David A. Brown, Director, EH&S</i>		

PURPOSE

Establish standard laboratory use for 5- Bromo-2'-deoxyuridine (BrdU) used in florescent cell labeling, radiation therapy, and anti-viral treatment.

SCOPE

Research use of 5- Bromo-2'-deoxyuridine (BrdU) in a laboratory environment.

HEALTH, SAFETY, ENVIRONMENTAL INFORMATION

Physical Hazards

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials, dust generation, moisture, closed ventilation, excess heat.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides (NO_x), Hydrogen bromide gas

Hazardous Polymerization: Has not been reported.

Health Hazards

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

Chronic: Genotoxicity, DNA damage, DNA inhibition, reproductive disorders, targets the immune system.

Personal Protective Equipment (PPE)

- **Eye Protection**
 - Safety glasses, goggles or face shields shall be worn during operations in which BrdU might contact the eyes (e.g., through vapors or splashes of solution).
 - Ordinary (street) prescription glasses do not provide adequate protection. Adequate safety glasses must meet the requirements of the Practice for Occupational Education Eye and Face Protection (ANSI Z87.1-1989) and must be equipped with side shields.
 - Contact lenses shall not be worn if the potential exist for BrdU exposure.
- **Hand Protection**
 - Nitrile gloves impervious to BrDu shall always be worn.
- **Lab Coats, etc.**
 - Lab coat, closed-toe shoes and long-sleeved clothing shall be worn when handling BrDU. Protective clothing shall be worn to prevent any possibility of skin contact with BrdU.
- **Safety Shower / Eye Wash**
 - Where the eyes or body of any person may be exposed to BrdU, suitable facilities for quick drench or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
 - Bottle type eyewash stations are not acceptable.

Designated Area for Use and Containment Devices

All BrDU work shall be conducted in a biosafety cabinet/fumehood.

Waste Disposal

Do not dispose of BrdU products via drains; keep products in closed containers for EH&S disposal.

Decontamination of Equipment and Area

Contact WFUHS EH&S at 716-1201 for decontamination information.

Spill and Accident Procedures

Move excess personnel out of area. Wearing proper PPE mentioned above, sweep up and keep in suitable, closed container for disposal.

If inhaled, move into fresh air. If individual is not breathing give artificial respiration.

If case of skin contact wash with soap and plenty of water.

In case of eye contact flush with water.

If ingested, rinse mouth with water.