Section 1. Product and Company Identification

Product Name 5-Bromo-2'-Deoxyuridine
Product ID B6856
Chemical Name (Synonyms) Broxuridine; 5-bromouracil deoxyriboside; BUdR; Broxine; Neomark; Radibud
Supplier LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com
Emergency Phone # 1-800-424-9300

Section 2. Hazards Identification

GHS Classification Germ cell mutagenicity (Category 1B), H340
Reproductive toxicity (Category 2), H361

GHS Label elements including precautionary statements

Pictogram
Signal word Danger
Hazard and precautionary statements
Hazard statements
H340 - May cause genetic defects.
H361 - Suspected of damaging fertility of the unborn child.
Precautionary statements
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P281 - Use personal protective equipment as required.
P308 + P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification
Health hazard: 0
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 0
Fire hazard: 0
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. Germ cell mutagenicity - May cause genetic defects. Reproductive Toxicity - Suspected of damaging fertility of the unborn child.

Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Formula</th>
<th>CAS No.</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9H11BrN2O5</td>
<td>59-14-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formula Wt.</td>
<td>EC No.</td>
<td>307.11</td>
<td>200-415-9</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water. Consult a physician.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

Flash Point
Not available.

Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Firefighting Procedures
Wear self-contained breathing apparatus for fire fighting if necessary.

Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx), hydrogen bromide gas.

Section 6. Accidental Release Measures

Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20˚C
Keep in a dry place. Storage class (TRGS 510): Non-combustible, acute toxic Cat. 3/ toxic hazardous materials or hazardous materials causing chronic effects.

Hazardous Decomposition Products
Not available.

Other Remarks
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**
Contains no substances with occupational exposure limit values.
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**PERSONAL PROTECTION**
- **Eye/face protection**: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- **Skin protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).
- **Body protection**: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid.</td>
<td>White crystalline powder.</td>
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</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
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<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
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<tbody>
<tr>
<td>187-189°C</td>
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</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>187-189°C</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in dimethyl-acetamide, 1N NaOH, or dimethylsulfoxide. Slightly soluble in water.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Ignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower explosion limit</th>
<th>Autoignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Vapor pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly soluble in water.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Strong oxidizing agents.

**Hazardous Decomposition Products**
Not available.
Section 11. Toxicological Information

**Oral LD50**
Rat - 8,400 mg/kg

**Skin corrosion/irritation**
Not available.

**Inhalation LC50**
Not available.

**Serious eye damage/irritation**
Not available.

**Dermal LD50**
Not available.

**Respiratory or skin sensitization**
Not available.

**Other information on acute toxicity**
Not available.

**Germ cell mutagenicity**
In vivo tests showed mutagenic effects. Rat, embryo, DNA damage. Rat, DNA inhibition.

**Reproductive Toxicity**
Suspected human reproductive toxicant.

**Aspiration Hazard**
Not available.

**Specific organ toxicity single exposure (GHS)**
Not available.

**Synergistic effects**
Not available.

**Specific organ toxicity repeated exposure (GHS)**
Not available.

**Additional Information**
RTECS: YU7350000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Potential Health Effects**
- Inhale - 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. Germ cell mutagenicity - May cause genetic defects.
- Reproductive Toxicity - Suspected of damaging fertility of the unborn child.

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

**Toxicity**
Not available.

**Mobility in soil**
Not available.

**PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not
Waste Disposal

Dispose of material according to all federal, state, and local regulations. Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 13. Disposal Considerations

Persistence and degradability  Not available.

Bioaccumulative potential  Not available.

Bioaccumulative potential  Not available.

Section 14. Transport Information

DOT (US)  Not dangerous goods.

IATA  Not dangerous goods.

IMDG  Not dangerous goods.

Further Information

Section 15. Regulatory Information

Reach No.

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 Components  Chronic health hazard

Massachusetts Right To Know Components  No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components  5-Bromo-2’-Deoxyuridine  CAS No.:  59-14-3  Revision Date:

New Jersey Right To Know Components  5-Bromo-2’-Deoxyuridine  CAS No.:  59-14-3  Revision Date:

California Prop 65 Components  This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Other information  The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.