Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Camptothecin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>C0150</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>(S)-4-Ethyl-4-hydroxy-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione</td>
</tr>
<tr>
<td>Supplier</td>
<td>LKT Laboratories, Inc</td>
</tr>
<tr>
<td></td>
<td>545 Phalen Blvd.</td>
</tr>
<tr>
<td></td>
<td>St. Paul, MN 55130 USA</td>
</tr>
<tr>
<td></td>
<td>Ph: 651-644-8424 Fax: 651-644-8357</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.lktlabs.com">www.lktlabs.com</a> - <a href="mailto:getinfo@lktlabs.com">getinfo@lktlabs.com</a></td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

Section 2. Hazards Identification

GHS Classification

Acute toxicity, Oral (Category 3), H301

GHS Label elements including precautionary statements

Pictogram

Signal word

Danger

Hazard and precautionary statements

Hazard statement

H301 - Toxic if swallowed.

Precautionary statements

P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment (see supplemental first aid instructions in section 4).
P330 - Rinse mouth.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 2
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating

Health hazard: 2
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects

Inhalation - May be harmful if inhaled. May cause respiratory irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion - Acute toxicity. Toxic if swallowed.

## Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>Formula Wt.</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C&lt;sub&gt;20&lt;/sub&gt;H&lt;sub&gt;16&lt;/sub&gt;N&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;4&lt;/sub&gt;</td>
<td>348.35</td>
<td>7689-03-4</td>
<td></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. Remove contact lenses if applicable and flush eyes with water again.

### Skin Contact
Wash off with soap and plenty of water. Take victim immediately to hospital. 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 and protective clothing if necessary.

### Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx).

## Section 6. Accidental Release Measures

### Personal Precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

### 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. 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.

### Hazardous Decomposition Products
Not available.

### Other Remarks
None.
## Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values.

**PERSONAL PROTECTION**

**Eye/face protection:** Face shield and safety glasses 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:** Complete suit protecting against chemicals. 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 N99 (US) or type P2 (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).

## Section 9. Physical and Chemical Properties

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

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Density</th>
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</thead>
<tbody>
<tr>
<td>Range: 264˚C - 267˚C.</td>
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</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in DMSO.</td>
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</table>

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

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>207 mg/L - water temp 25˚C</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>log P: 1.74</td>
<td>Not available.</td>
</tr>
</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>

## 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: 153 mg/kg
- Mouse: 50.1 mg/kg

**Inhalation LC50**
- Not available.

**Dermal LD50**
- Not available.

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

**Skin corrosion/irritation**
- Not available.

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

**Respiratory or skin sensitization**
- Not available.

**Germ cell mutagenicity**
- Mouse: Lymphocyte, other mutation test systems.
- Hamster: Ovary, sister chromatid exchange.
- Human: Leukocyte, DNA inhibition.
- Chicken: Embryo, DNA inhibition.
- Monkey: Kidney, DNA damage.

**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.

**Reproductive Toxicity**
- Not available.

**Teratogenicity**
- Not available.

**Synergistic effects**
- Not available.

**Potential Health Effects**
- Inhalation - May be harmful if inhaled. May cause respiratory irritation.
- Skin - May be harmful if absorbed through skin. May cause skin irritation.
- Eyes - May cause eye irritation.
- Ingestion - Acute toxicity. Toxic if swallowed.

**Aspiration Hazard**
- Not available.

**Signs and symptoms of exposure**

**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
Persistence and degradability Not available.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal
Dispose of material according to all federal, state, and local regulations. Offer material to a licensed, professional waste disposal company. 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. Dispose of as unused product.

Section 14. Transport Information

DOT (US) UN number: 1544 Class: 6.1 Packing group: III Proper shipping name: Alkaloids, solid, n.o.s. (Camptothecin) Marine pollutant: No Poison Inhalation Hazard: No

IATA UN number: 1544 Class: 6.1 Packing group: III Proper shipping name: Alkaloids, solid, n.o.s. (Camptothecin)


Further Information

Section 15. Regulatory Information

Reach No.

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

SARA 313 Components 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 Acute health hazard.

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

Pennsylvania Right To Know Components Camptothecin CAS #: 7689-03-4 Revision Date:

New Jersey Right To Know Components Camptothecin CAS #: 7689-03-4 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.