### Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Chlortetracycline Hydrochloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>C2951</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>Aureociclina, Isphamycin.</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         | Skin irritation (Category 2) H315 |
|                           | Eye irritation (Category 2A) H319  |
|                           | Specific target organ toxicity - single exposure (Category 3) Respiratory system, H335 |

### GHS Label elements including precautionary statements

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>![Warning Symbol]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word</td>
<td>Warning</td>
</tr>
<tr>
<td>Hazard and</td>
<td></td>
</tr>
<tr>
<td>precautionary</td>
<td></td>
</tr>
<tr>
<td>statements</td>
<td></td>
</tr>
<tr>
<td>Hazard statement</td>
<td>H315 - Causes skin irritation.</td>
</tr>
<tr>
<td></td>
<td>H319 - Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td>H335 - May cause respiratory irritation.</td>
</tr>
<tr>
<td>Precautionary statements</td>
<td>P261 - Avoid breathing dust, fumes, gas, mist, vapors and spray.</td>
</tr>
<tr>
<td></td>
<td>P264 - Wash skin thoroughly after handling.</td>
</tr>
<tr>
<td></td>
<td>P271 - Use only outdoors or in a well-ventilated area.</td>
</tr>
<tr>
<td></td>
<td>P280 - Wear protective gloves, eye protection, face protection.</td>
</tr>
<tr>
<td></td>
<td>P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
<tr>
<td></td>
<td>P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a</td>
</tr>
<tr>
<td></td>
<td>POISON CENTER/ doctor if you feel unwell.</td>
</tr>
<tr>
<td></td>
<td>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if</td>
</tr>
<tr>
<td></td>
<td>present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td></td>
<td>P332 + P313 - If skin irritation occurs: Get medical advice/ attention.</td>
</tr>
<tr>
<td></td>
<td>P357 + P313 - If eye irritation persists: Get medical advice/ attention.</td>
</tr>
<tr>
<td></td>
<td>P362 - Take off contaminated clothing and wash before reuse.</td>
</tr>
<tr>
<td></td>
<td>P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.</td>
</tr>
<tr>
<td></td>
<td>P405 - Store locked up.</td>
</tr>
<tr>
<td></td>
<td>P801 - Dispose of contents/ container to an approved waste disposal plant.</td>
</tr>
</tbody>
</table>

### 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.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>( \text{C}<em>{22}\text{H}</em>{23}\text{ClN}<em>{2}\text{O}</em>{8} \cdot \text{HCl} )</td>
<td>Formula Wt. 515.35</td>
</tr>
<tr>
<td>CAS No.</td>
<td>64-72-2</td>
<td>EC No. 200-591-7</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 plenty of water for at least 15 minutes and consult a physician.

**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 firefighting if necessary.

**Unusual Fire Hazards**
Not available.

Section 6. Accidental Release Measures

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

**Environmental Precautions**
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: Ambient.

**Hazardous Decomposition Products**
Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas.

**Other Remarks**
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values. Hazardous components without workplace control parameters. 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: For nuisance exposures, use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) of type ABEK-P2 (EU EN 1243) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

**Physical State**
Solid.

**Color**
Yellow crystalline powder.

**Boiling Point**
Not available.

**Melting Point**
>210°C (dec)

**Solubility**
Soluble at about 28°C of: water (13 mg/mL), methanol (17.4mg/mL) or ethanol (1.7mg/mL).

**Flash Point**
Not available.

**Water solubility**
Not available.

**Partition coefficient: n-octanol/water**
Not available.

**Relative vapor density**
Not available.

**Physical State**
Color
Yellow crystalline powder.

**Boiling Point**
Not available.

**Melting Point**
>210°C (dec)

**Solubility**
Soluble at about 28°C of: water (13 mg/mL), methanol (17.4mg/mL) or ethanol (1.7mg/mL).

**Flash Point**
Not available.

**Lower explosion limit**
Not available.

**Autoignition temperature**
Not available.

**Upper explosion limit**
Not available.

**Water solubility**
Not available.

**Partition coefficient: n-octanol/water**
Not available.

**Relative vapor density**
Not available.

Section 10. Stability and Reactivity

**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 chloride gas.
Section 11. Toxicological Information

Oral LD50  
Mouse - 2,314 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  
Not available.

Reproductive Toxicity  
Laboratory experiments have shown teratogenic effects.

Aspiration Hazard  
Not available.

Synergistic effects  
Not available.

Specific organ toxicity single exposure (GHS)  
Inhalation - May cause respiratory irritation.

Additional Information  
RTECS: QI7800000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Signs and symptoms of exposure  
Nausea, vomiting, stomach - irregularities - based on human evidence.

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.

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.
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
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 to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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  Acute health hazard, chronic health hazard.

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

Pennsylvania Right To Know Components  Chlortetracycline Hydrochloride  CAS #: 64-72-2  Revision Date:

New Jersey Right To Know Components  Chlortetracycline Hydrochloride  CAS #: 64-72-2  Revision Date:

California Prop 65 Components  WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.  Chlortetracycline Hydrochloride  CAS #: 64-72-2  Revision Date: 2007-09-28

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.