Section 1. Product and Company Identification

Product Name: Cloxacillin Sodium Monohydrate  
Product ID: C4756  
Chemical Name (Synonyms): Bactopen; Cloxapen; Cloxypen; Ekvacillin; Orbenin; Methocillin-S.  
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:  
Skin irritation (Category 2), H315  
Skin sensitization (Category 1), H317  
Eye irritation (Category 2A), H319  
Respiratory sensitization (Category 1), H334  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements including precautionary statements

Pictogram:  
Signal word: Danger

Hazard statements:  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 - May cause respiratory irritation.

Precautionary statements:  
P261 - Avoid breathing dust, fumes, gas, mist, vapors and spray.  
P264 - Wash skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear protective gloves, eye protection and face protection.  
P285 - In case of inadequate ventilation, wear respiratory protection.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 - Specific treatment (see supplemental first aid instructions on this label).  
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
P362 - Take off contaminated clothing and wash before reuse.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents or 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 cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause respiratory sensitization.  
Skin - Causes skin sensitization. Causes skin irritation. May cause an allergic skin reaction.
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>C_{19}H_{17}ClN_{3}NaO_{5}S \cdot H_{2}O</td>
<td>Formula Wt: 475.88</td>
</tr>
<tr>
<td>CAS No.</td>
<td>7081-44-9</td>
<td>EC No: 211-390-9</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
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact
Wash off with soap and plenty of water.

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), sulfur oxides, hydrogen chloride gas, and sodium oxides.

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. Normal measures for preventive fire protection.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: Ambient

Hazardous Decomposition Products
Not available.

Other Remarks
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS

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 the workday.

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: 0.11mm, 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: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respiratory. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) 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

White or almost-white crystalline powder.

Boiling Point

Not available.

Volatile

Not available.

Melting Point

170°C (dec)

Density

Not available.

Solubility

Soluble in water, methanol, ethanol or pyridine.

pH

Not available.

Flash Point

Not available.

Ignition temperature

Not available.

Lower explosion limit

Not available.

Autoignition temperature

Not available.

Upper explosion limit

Not available.

Vapor pressure

Not available.

Water solubility

Not available.

Odor

Not available.

Partition coefficient: n-octanol/water

Not available.

Odor Threshold

Not available.

Relative vapor density

Not available.

Evaporation rate

Not available.

Section 10. Stability and Reactivity

Stability

Stable under recommended storage conditions.

Materials To Avoid

Not available.

Hazardous Decomposition Products

Not available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>Rat - 5,000 mg/kg Mouse - 5,000 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>No data available.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>No data available.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other information on acute toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific organ toxicity single exposure (GHS)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific organ toxicity repeated exposure (GHS)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Synergistic effects</td>
<td>Not available.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Additional Information</td>
<td>RTECS: XH8920000</td>
</tr>
</tbody>
</table>
| Potential Health Effects               | Inhale - May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause respiratory sensitization.  
|                                         | Skin - Causes skin sensitization. Causes skin irritation. May cause an allergic skin reaction. 
|                                         | Eyes - Causes serious 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.  
|                                         | 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Not available.</td>
</tr>
<tr>
<td>PBT and vPvB</td>
<td>Not available.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Not available.</td>
</tr>
<tr>
<td>PBT/vPvB assessment</td>
<td>Not available as chemical safety assessment not required/not</td>
</tr>
</tbody>
</table>
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.

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Section 14. Transport Information

**DOT (US)** Not dangerous goods.

**IATA** Not dangerous goods.

**IMDG** Not dangerous goods.

Further Information

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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** No SARA hazards.

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

**Pennsylvania Right To Know Components** Cloxacillin sodium hydrate CAS No. 7081-44-9 Revision Date:

**New Jersey Right To Know Components** Cloxacillin sodium hydrate CAS No. 7081-44-9 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.

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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.