Section 1. Product and Company Identification

Product Name: Acyclovir
Product ID: A1096
Chemical Name (Synonyms): LKT Laboratories, Inc
Supplier: 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
Eye irritation (Category 2A), H319
Specific Target Organ Toxicity - single exposure (Category 3), Respiratory system, H335
Acute Aquatic Toxicity, (Category 3) H412

GHS Label elements including precautionary statements

Pictogram
Signal word: Warning
Hazard and precautionary statements

Hazard statements
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements
P261 - Avoid breathing dust, fumes, gas, mist, vapors, and spray.
P264 - Wash hands, face, and any exposed skin thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, and face 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 + P315 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 - IF SKIN irritation occurs: Get medical advice/attention.
P360 + P364 - Take off contaminated clothing and wash before reuse.
P390 - Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
P405 - Store locked up.
P501 - Dispose of contents/and or container to an approved waste disposal plant.

HMIS Classification
Health hazard: 1
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 1
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. Causes skin irritation.
Eyes - Causes serious eye irritation.
Ingestion - May be harmful if swallowed.

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>C₈H₁₁N₅O₃</td>
<td>225.20</td>
</tr>
<tr>
<td>CAS No.</td>
<td>59277-89-3</td>
<td>EC No. 261-685-1</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice

Eye Contact
Flush eyes with plenty of water for 15 minutes as a precaution.

Skin Contact
Wash off with soap and plenty of water for at least 15 minutes. Remove clothing and wash before reuse. Consult physician if irritation occurs.

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

Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless directed to do so by medical personnel.

Section 5. Firefighting Measures

Flash Point
Not available.

Extinguising 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).

Section 6. Accidental Release Measures

Personal Precautions
Avoid dust formation. Avoid breathing dust, vapors, mist, gas or dust.

Environmental Precautions
Do not release into the environment.

Methods and materials for containment and cleanup
Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Avoid breathing dust, fumes, gas, mist, vapors, and spray. Avoid prolonged or repeated exposure.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient. Store at room temperature: Keep in a dry place. Storage class (TRGS 510): Non combustible solids.

Hazardous Decomposition Products
Not available.

Other Remarks
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**PERSONAL PROTECTION**

- **Eye/face protection**: 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.
- **Body protection**: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- **Respiratory protection**: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. 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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>White crystalline powder.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>256.5 - 257°C. When heated, it decomposes.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>MeOH. Poor solubility in water.</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Lower explosion limit</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Upper explosion limit</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>Poor solubility in water.</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>log Pow: -1.559</td>
</tr>
<tr>
<td><strong>Rel. vapor density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>n-octanol/water</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></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: > 20,000 mg/kg  
- Mouse: 10,000 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**  
In vitro tests showed mutagenic effects. Result: Conflicting results have been seen in different studies. Dominant lethal test. Mouse - Result: negative.

**Carcinogenicity**  
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.  
- IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Acyclovir).  
- 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**  
In fetal development, animal testing did not show any effects. Based on animal experiments, some evidence of adverse effects on sexual function and fertility.

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

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

**Teratogenicity**  
Not available.

**Potential Health Effects**  
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: Causes serious eye irritation.  
Ingestion: May be harmful if swallowed.

**Aspiration Hazard**  
Not available.

**Synergistic effects**  
Not available.

**Additional Information**  
RTECS: UP0791400  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Signs and symptoms of exposure**  
Not available.

### 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 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.

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.

Section 13. Disposal Considerations

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 No SARA hazards.

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

Pennsylvania Right To Know Components Acyclovir CAS #: 59277-89-3 Revision Date:

New Jersey Right To Know Components Acyclovir CAS #: 59277-89-3 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.
Updated 12/4/2017

For emergencies in the USA, call CHEMTREC 800-424-9300