Section 1. Product and Company Identification

Product Name: Ganciclovir
Product ID: G0152
Chemical Name (Synonyms): DHPG; 2'NDG; BIOLF
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: Reproductive toxicity (Category 1B), H360

GHS Label elements including precautionary statements

Pictogram

Signal word: Danger

Hazard and precautionary statements

Hazard statement
H360 - May damage fertility or 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.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health Hazard: 1
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. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Ingredient: Title Compound - Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula Wt. 255.23</td>
</tr>
<tr>
<td>Formula C9H13N5O4</td>
</tr>
<tr>
<td>CAS No. 82410-32-0</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 with water as a precaution.

Skin Contact
Wash 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
Carbon oxides, nitrogen oxides (NOx).

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
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 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: Ambient

Hazardous Decomposition Products
Carbon oxide, nitrogen oxides (NOx).

Other Remarks
Storage class (TRGS 510): Noncombustible, acute toxic Cat. 3/ toxic hazardous materials or hazardous materials causing chronic effects.
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 workday.

**PERSONAL PROTECTION**

**Eye/face Protection**
Safety glasses with side-shields conforming to EN 166. 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**
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).

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 crystal powder.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>250°C (dec)</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in water (2 mg/mL), 0.1 M HCl (10 mg/mL), DMSO (5 mg/mL), ethanol (&lt;1 mg/mL).</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Lower explosion limit</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Upper explosion limit</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>Soluble in water (2 mg/mL).</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative vapor density</strong></td>
<td>Not available.</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**
Keep away from heat and strong oxidizing agents.

**Hazardous Decomposition Products**
Carbon oxide, nitrogen oxides (NOx).
## Section 11. Toxicological Information

### Oral LD50
Mouse - > 2,000 mg/kg

### Skin corrosion/irritation
Not available.

### Inhalation LC50
Not available.

### Dermal LD50
Not available.

### Other information on acute toxicity
Not available.

### Germ cell mutagenicity
Human lymphocyte
Sister chromatoid exchange

### Reproductive Toxicity
Presumed 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: MF8407000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Potential Health Effects
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: May be harmful if swallowed.
Reproductive toxicity: May damage fertility or 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 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 to dispose of as unused product.

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 II, 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**
Ganciclovir CAS #: 82410-32-0 Revision Date:

**New Jersey Right To Know Components**
Ganciclovir CAS #: 82410-32-0 Revision Date:

**California Prop 65 Components**
WARNING! This product contains a chemical known to the State of California to cause cancer. WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Ganciclovir CAS #: 82410-32-0 Revision Date: 1997-08-26

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.