Section 1. Product and Company Identification

Product Name: Dipyridamole
Product ID: D3362
Chemical Name (Synonyms):
- Anginal; Cardoxin; Coridil; Dipyridan; Gulliostin; Natyl; Persantine; Piroan; Protangix

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
- Eye irritation (Category 2A), H319
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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.

Precautionary statements:
- P261 - Avoid breathing dust, fumes, gas, mist, vapors, and spray.
- P264 - Wash skin thoroughly after handling.
- P271 - Use only outdoors on in a well-ventilated area.
- P280 - Wear protective gloves, 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 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 - Specific treatment (see supplemental first aid instruction on this label).
- P332 + P313 - If skin irritation occurs: Get medical advice/attention.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.
- 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/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 tract irritation.
- Skin - May be harmful if absorbed through skin. Causes skin irritation.
- Eyes - Eye irritation. Causes serious 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>C_{24}H_{40}N_{8}O_{4}</td>
<td>Formula Wt.</td>
</tr>
<tr>
<td>CAS No.</td>
<td>58-32-2</td>
<td>EC No.</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. Contact 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 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**
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**
Ingestion - May be harmful if swallowed.
Specific target organ toxicity - single exposure, respiratory system.
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. 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) 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

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Bright yellow crystalline powder.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>163°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in methanol, chloroform, and ethanol. Slightly soluble in water.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Slightly soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation LC$_{50}$</td>
<td>Not available.</td>
<td>Skin corrosion/irritation</td>
</tr>
<tr>
<td>Dermal LD$_{50}$</td>
<td>Not available.</td>
<td>Serious eye damage/irritation</td>
</tr>
<tr>
<td>Other information on acute toxicity</td>
<td>Not available.</td>
<td>Respiratory or skin sensitization</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not available.</td>
<td>Germ cell mutagenicity: rat, liver, DNA inhibition; rat, liver, other mutation test systems; rat, DNA inhibition; mouse, ascites tumor, other mutation test systems</td>
</tr>
<tr>
<td>Specific organ toxicity single exposure (GHS)</td>
<td>Inhalation - May cause respiratory irritation.</td>
<td>Aspiration Hazard</td>
</tr>
<tr>
<td>Specific organ toxicity repeated exposure (GHS)</td>
<td>Not available.</td>
<td>Additional Information: RTECS: KK7450000</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>Not available.</td>
<td>Signs and symptoms of exposure: Stomach - irregularities - based on human evidence</td>
</tr>
<tr>
<td>Potential Health Effects</td>
<td>Inhalation - May be harmful if inhaled. May cause respiratory tract irritation. Skin - May be harmful if absorbed through skin. Causes skin irritation. Eyes - Eye irritation. Causes serious eye irritation. Ingestion - May be harmful if swallowed. Specific target organ toxicity - single exposure, respiratory system.</td>
<td></td>
</tr>
</tbody>
</table>

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Not available.</th>
<th>Mobility in soil</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT and vPvB assessment</td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/not</td>
<td></td>
<td></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.

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**
- Dipyridamole CAS No. 58-32-2

**New Jersey Right To Know Components**
- Dipyridamole CAS No. 58-32-2

**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.