# Safety Data Sheet

## Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th><strong>Product Name</strong></th>
<th>Allopurinol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product ID</strong></td>
<td>A4445</td>
</tr>
<tr>
<td><strong>Chemical Name</strong></td>
<td>(Synonyms)</td>
</tr>
<tr>
<td></td>
<td>Adenock; Apurol; Allozym; Apurin; Bloxanth; Embarin; Gichtex; Ketanriff; Lysuron; Urosin; Zyloric</td>
</tr>
<tr>
<td><strong>Supplier</strong></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><strong>Emergency Phone #</strong></td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

## Section 2. Hazards Identification

### GHS Classification
- Acute toxicity, Oral (Category 3), H301
- Skin sensitization (Category 1), H317

### GHS Label elements including precautionary statements

#### Hazard and precautionary statements
- **Hazard statements**
  - H301 - Toxic if swallowed.
  - H317 - May cause an allergic skin reaction.
- **Precautionary statements**
  - P261 - Avoid breathing dust, fumes, gas, mist, vapors, and spray.
  - P264 - Wash skin thoroughly after handling.
  - P270 - Do not eat, drink, or smoke when using this product.
  - P272 - Contaminated work clothing should not be allowed out of the workplace.
  - P280 - Wear protective gloves.
  - P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
  - P311 - Specific treatment (see supplemental first aid instruction on this label).
  - P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
  - P363 - Wash contaminated clothing before reuse.
  - P405 - Store locked up.
  - P501 - Dispose of contents/container to an approved waste disposal plant.

#### Hazard statements
- 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. May cause an allergic skin reaction. Skin sensitization.
- Eyes - May cause eye irritation.
Ingestion - Acute toxicity. Toxic 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>C₅H₄N₄O</td>
<td>Formula Wt. 136.11</td>
</tr>
<tr>
<td>CAS No.</td>
<td>315-30-0</td>
<td>EC No. 206-250-9</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
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water. Take victim immediately to hospital. 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 fire fighting if necessary.

Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx).

Section 6. Accidental Release Measures

Personal Precautions
Wear respiratory protection. 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 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
Not available.

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

**Personal protective equipment**
Contains no substances with occupational exposure limit values.
Avoid contact with skin, eyes, and clothing.  Wash hands before breaks and immediately after handling the product.

**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:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N99 (US) or type P2 (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>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid.</td>
<td>White crystal powder.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
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</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>&gt;350°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>Soluble in Methanol and DMSO. Slightly soluble in ethanol (0.30 mg/ml) and water (0.48 mg/ml).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water solubility</td>
<td>Slightly soluble in water 0.48 mg/ml.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative vapor density</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Oxidizing agents.

**Hazardous Decomposition Products**
Not available.
Section 11. Toxicological Information

Oral LD50  
LD50 - Mouse - 78mg/kg  
LDLO - Human - female - 88 mg/kg  
Remarks: Blood: Leukopenia

Inhalation LC50  
Not available.

Dermal LD50  
Not available.

Other information on acute toxicity  
Not available.

Skin corrosion/irritation  
May cause sensitization by skin contact.

Serious eye damage/irritation  
Not available.

Respiratory or skin sensitization  
Not available.

Germ cell mutagenicity  
Not available.

Reproductive Toxicity  
Developmental toxicity - mouse - intraperitoneal.  
Effects on embryo or fetus: Fetotoxicity (except death, e.g., stunted fetus).  
Specific developmental abnormalities: Craniofacial (including nose and tongue).

Aspiration Hazard  
Not available.

Synergistic effects  
Not available.

Specific organ toxicity single exposure (GHS)  
Not available.

Specific organ toxicity repeated exposure (GHS)  
Not available.

Teratogenicity  
Not available.

Additional Information  
RTECS: UR0785000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Signs and symptoms of exposure  
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 an allergic skin reaction. Skin sensitization.  
Eyes - May cause eye irritation.  
Ingestion - Acute toxicity. Toxic 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

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)

UN number: 2811  Class: 6.1  Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (Allopurinol)
Marine pollutant: No  Poison inhalation hazard: No

IATA

UN number: 2811  Class: 6.1  Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (Allopurinol)

IMDG

UN number: 2811  Class: 6.1  Packing group: III  EMS No.: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Allopurinol)
Marine pollutant: No

Further Information

Section 15. Regulatory Information

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  Allopurinol  CAS #: 315-30-0  Revision Date:

New Jersey Right To Know Components  Allopurinol  CAS #: 315-30-0  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.