Section 1. Product and Company Identification

Product Name: Azelaic Acid
Product ID: A9817
Chemical Name (Synonyms): 1,7-heptanedicarboxylic acid, Anchoic acid, Azelex
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: Eye irritation (Category 2A) H319

GHS Label elements including precautionary statements

Pictogram
Signal word: Warning

Hazard and precautionary statements
Hazard statement: H319 - Causes serious eye irritation.
Precautionary statements:
P264 - Wash skin thoroughly after handling.
P280 - Wear eye protection/ face protection.
P305 + P351 + P338 - IF IN EYES:  Rinse cautiously with water for several minutes.  Remove contact lenses, if present and easy to do.  Continue rinsing.
P337 + P313 - If eye irritation persists:  Get medical advice/ attention.

HMIS Classification
Health hazard: 2
Chronic health hazard: *
Flammability: 1
Physical hazard: 0

NFPA Rating
Health hazard: 2
Fire hazard: 1
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 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>C₉H₁₆O₄</td>
<td>188.22</td>
</tr>
<tr>
<td>CAS No.</td>
<td>123-99-9</td>
<td>EC No. 204-669-1</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. 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
209˚C

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
Not available.

Section 6. Accidental Release Measures

Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation.

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. 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
Hazardous decomposition products formed under fire conditions. - Carbon oxides.

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

**Personal protective equipment**

**EXPOSURE CONTROLS**
- Contains no substances with occupational exposure limit values.
- Hazardous components without workplace control parameters.
- 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.
- **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 OVAG/P99 (US) or type ABEK-P2 (EU EN 1243) 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><strong>Color</strong></td>
<td>White crystalline powder.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>284.5˚C</td>
</tr>
<tr>
<td><strong>Volutility</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>106.5˚C</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in boiling water and alcohol.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>209˚C</td>
</tr>
<tr>
<td><strong>Ignition temperature</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>Not available.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>log Pow: 1.57 at 25˚C</td>
</tr>
<tr>
<td><strong>Relative vapor density</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**: Bases, reducing agents, oxidizing agents.
- **Hazardous Decomposition Products**: Hazardous decomposition products formed under fire conditions. - Carbon oxides.
Section 11. Toxicological Information

**Oral LD50** Not available.

**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** Maximisation Test - Guinea pig
Result: Not a skin sensitizer.
(OECD Test Guideline 406)

**Germ cell mutagenicity** Reverse mutation assay.
Salmonella typhimurium
Result: negative

**Reproductive Toxicity** Not available.

**Aspiration Hazard** Not available.

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

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

**Teratogenicity** Not available.

**Additional Information** RTECS: CM1930000 Repeated dose toxicity - No data available (Azelaic acid)
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. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
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.
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**
- **Toxicity to fish**: Static test LC50 - Leuciscus idus (Golden orfe) - 310 mg/l - 48 h
- **Toxicity to daphnia and other aquatic invertebrates**: Static test EC50 - Daphnia magna (Water flea) - 70 mg/l - 24 h (OECD Test Guideline 202)
- **Toxicity to algae**: Static test EC50 - Pseudokirchneriella subcapitata (green algae) - > 100

**Mobility in soil** Not available.

**PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not
Persistence and degradability: Not available.

Bioaccumulative potential: 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 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.

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

Pennsylvania Right To Know Components Azelaic Acid CAS #: 123-99-9 Revision Date:

New Jersey Right To Know Components Azelaic Acid CAS #: 123-99-9 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.

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.