Section 1. Product and Company Identification

Product Name: Oxolinic acid
Product ID: O9458

Chemical Name (Synonyms):

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:
Target Organs: Central nervous system
Acute toxicity, Oral (Category 4)
Acute toxicity, Dermal (Category 5)

GHS Label elements including precautionary statements

Pictogram
Signal word: Warning

Hazard and precautionary statements:

Hazard statements:
H302 - Harmful if swallowed.
H313 - May be harmful in contact with skin.

Precautionary statement:
None

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

NFPA Rating:
Health hazard: 0
Fire: 0
Reactivity hazard: 0

Potential Health Effects:
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: Harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Formula</th>
<th>Formula Wt.</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_{13}H_{11}NO_{5}</td>
<td>261.23</td>
<td>14698-29-4</td>
<td>238-750-8</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

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

Not available. Not flammable or combustible.

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

Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).

Section 6. Accidental Release Measures

Personal Precautions

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

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: 2-8°C.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx). Other decomposition products - no data available.

Other Remarks

Ingestion: Harmful if swallowed.
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

Contains no substances with occupational exposure limit values.

PERSONAL PROTECTIVE EQUIPMENT

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).

Hand 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.

Eye protection: Safety glasses with side-shields conforming to EN166 use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and 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.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Autoignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<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

Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx). Other decomposition products - no data available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>LD50 Oral - rat - 525 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>Not available.</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>LD Dermal - rat - &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other information on acute toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Genotoxicity in vitro - Hamster - Lungs DNA inhibition Genotoxicity in vitro - rat - Oral DNA damage</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific organ toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Single exposure (GHS)</td>
<td></td>
</tr>
<tr>
<td>Specific organ toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Repeated exposure (GHS)</td>
<td></td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>Not available.</td>
</tr>
<tr>
<td>Synergistic effects</td>
<td>Not available.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Additional Information</td>
<td>RTECS: J15075000</td>
</tr>
<tr>
<td>Signs and symptoms of exposure</td>
<td>To the best of knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.</td>
</tr>
</tbody>
</table>

**Potential Health Effects**

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: Harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: Harmful if swallowed.

**Carcinogenicity**

- Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic Effects: Testicular tumors. Carcinogenicity - rat - Oral 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Not available.</td>
</tr>
<tr>
<td>PBT and vPvB assessment</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Persistence and degradability  Not available.  

Bioaccumulative potential  Not available.  

Section 13. Disposal Considerations

Waste Disposal

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:** 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** Oxolinic acid CAS-No. 14698-29-4

**New Jersey Right To Know Components** Oxolinic acid CAS-No. 14698-29-4

**California Prop 65 Components** This product does not contain any chemicals known to 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.