Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name/Trade Name: **Oxolinic Acid**

Manufacturer: SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Commercial Name(s): Dioxacin, Emyrenil, Gramurin, Nidantin, Ossian, Oxoboi, Peitil, Prodoxol, Starner, Ultibid, Uiritrate, Uro-alvar, Urotrate, Uroxol

Synonym: 1-Ethyl-1,4-dihydro-6,7-methylenedioxy-4-oxo-3-quinolinecarboxylic acid; 1-Ethyl-6,7-methyleneoxy-4-quinolone-3-carboxylic acid

Chemical Name: 1,3-Dioxolo(4,5-g)quinoline-7-carboxylic acid

Chemical Family: Not available.

Chemical Formula: C13-H11-N-O5

Catalog Number(s): O2595, O2145

CAS#: 14698-29-4

RTECS: JI5075000

TSCA: TSCA 8(b) inventory: No products were found.

CI#: Not available.

In case of emergency: CHEMTREC (24hr) 800-424-9300
CALL (310) 516-8000

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Oxolinic Acid</td>
<td>14698-29-4</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Oxolinic Acid:

**ORAL (LD50):** Acute: 525 mg/kg [Rat]. 1890 mg/kg [Mouse].

Section 3. Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

**CARCINOGENIC EFFECTS:** Not available.

**MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

Continued on Next Page
Section 4. First Aid Measures

Eye Contact
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation
Not available.

Ingestion
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion
Not available.

Section 5. Fire and Explosion Data

Flammability of the Product
May be combustible at high temperature.

Auto-Ignition Temperature
Not available.

Flash Points
Not available.

Flammable Limits
Not available.

Products of Combustion
These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances
Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances
Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions
SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards
Not available.

Special Remarks on Explosion Hazards
Not available.

Section 6. Accidental Release Measures

Small Spill
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Continued on Next Page
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage
Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 8°C (46.4°F). Refrigerate at temperatures between 2-8 degrees C.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance
Solid. (Crystals solid.)

Molecular Weight
261.25 g/mole

pH (1% soln/water)
Not available.

Boiling Point
Not available.

Melting Point
315°C (599°F)

Critical Temperature
Not available.

Specific Gravity
Not available.

Vapor Pressure
Not applicable.

Vapor Density
Not available.

Vatility
Not available.

Odor Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
Not available.

Solubility
Not available.

Section 10. Stability and Reactivity Data

Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
Excess heat, incompatible materials

Incompatibility with various substances
Not available.

Corrosivity
Not available.

Continued on Next Page
### Special Remarks on Reactivity

Not available.

### Special Remarks on Corrosivity

Not available.

### Polymerization

Will not occur.

### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Inhalation. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>Acute oral toxicity (LD50): 525 mg/kg [Rat].</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Hazardous in case of skin contact (irritant), of ingestion, of inhalation.</td>
</tr>
</tbody>
</table>

**Special Remarks on Toxicity to Animals**

Not available.

**Special Remarks on Chronic Effects on Humans**

May affect genetic material (mutagenic)

May cause cancer based on animal test data

**Special Remarks on other Toxic Effects on Humans**

Acute Potential Health Effects:

Skin: May cause skin irritation.

Eyes: May cause eye irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, abdominal discomfort, constipation, and diarrhea, soreness of the mouth and gums, metallic taste. May affect behavior/central nervous system (insomnia, dizziness, weakness, headache, drowsiness, restlessness), respiration (dyspnea), heart (palpitations). May also cause visual disturbances, fever, anorexia, urticaria, and photosensitivity reactions. (Chronic Potential Health Effects: Prolonged or repeated ingestion may affect the blood (leukopenia, hemolytic anemia, elevations of serum bilirubin))

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The products of degradation are less toxic than the product itself.</td>
</tr>
</tbody>
</table>

**Special Remarks on the Products of Biodegradation**

Not available.

### Section 13. Disposal Considerations

**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.
## Section 14. Transport Information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>Not a DOT controlled material (United States).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Special Provisions for Transport</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>DOT (Pictograms)</td>
<td><img src="image" alt="Not a DOT controlled material" /></td>
</tr>
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</table>

## Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

No products were found.

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications**

<table>
<thead>
<tr>
<th>WHMIS (Canada)</th>
<th>Not controlled under WHMIS (Canada). This product has not yet been classified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCL (EEC)</td>
<td>R22- Harmful if swallowed. S24/25- Avoid contact with skin and eyes. S46- If swallowed, seek medical advice immediately and show this container or label.</td>
</tr>
</tbody>
</table>

**HMIS (U.S.A.)**

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Fire Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>E</td>
</tr>
</tbody>
</table>

**National Fire Protection Association (U.S.A.)**

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Reactivity</th>
<th>Specific hazard</th>
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<td>0</td>
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</tbody>
</table>

**WHMIS (Canada) (Pictograms)**

| ![WHMIS (Canada) Pictograms](image) |

**DSCL (Europe) (Pictograms)**

| ![DSCL (Europe) Pictograms](image) |

**TDG (Canada) (Pictograms)**

| ![TDG (Canada) Pictograms](image) |

**ADR (Europe) (Pictograms)**

| ![ADR (Europe) Pictograms](image) |

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*Continued on Next Page*
Protective Equipment

- Gloves.
- Lab coat.
- Dust respirator. Be sure to use an approved/certified respirator or equivalent.
- Splash goggles.

Section 16. Other Information

| MSDS Code | O5703 |
| References | Not available. |
| Other Special Considerations | Not available. |

Verified by Sonia Owen.  

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.