1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Oxalic Acid, Dihydrate
Product Code(s): 0326
UN-No: 3261
Synonyms: ACIDE OXALIQUE (FRENCH) * ACIDO OSSALICO (ITALIAN) * AKTISAL * AQUISAL * ETHANEDIOIC ACID * ETHANEDIONIC ACID * KYSELINA STAVELOVA (CZECH) * NCI-C55209 * OXAALZUUR (DUTCH) * OXALIC ACID (ACGIH:OSHA) * OXALSAEURE (GERMAN) *

Distributor: AMRESCO INC.
6681 Cochran Road
SOLON, OHIO 44139

Company Phone Number: 1-800-829-2805
Emergency Telephone Number: Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Potential Health Effects

Acute Toxicity
Eyes: Risk of serious damage to eyes. Avoid contact with eyes.
Skin: Toxic in contact with skin. Corrosive, causes burns.
Inhalation: Toxic by inhalation. Corrosive by inhalation.
Ingestion: Toxic if swallowed. Corrosive, causes burns.

Chronic Effects: No known effect based on information supplied.

Aggravated Medical Conditions: None known.

Environmental Hazard: See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C2H2O4.2H2O

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanedioic acid, dihydrate</td>
<td>6153-56-6</td>
<td>95-100</td>
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</tbody>
</table>
4. FIRST AID MEASURES

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact
Wash skin with soap and water.

Inhalation
Move to fresh air. If breathing becomes difficult, give oxygen.

Ingestion
Clean mouth with water and afterwards drink plenty of water.

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties
Not flammable.

Flash Point
Not determined

Suitable Extinguishing Media
Dry chemical, CO2, appropriate foam.

Hazardous Combustion Products
Carbon oxides

Explosion Data
- Sensitivity to Mechanical Impact: Not sensitive.
- Sensitivity to Static Discharge: Not sensitive.

Specific Hazards Arising from the Chemical
Fine powder is capable of creating a dust explosion.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up
Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling
Handle in accordance with good industrial hygiene and safety practice.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH
--- | --- | --- | ---
Ethanedioic acid, dihydrate 6183-56-6 | = 2 mg/m³ STEL <br> TWA: 1 mg/m³ | |

**Engineering Measures**
- Showers
- Eyewash stations
- Ventilation systems.

**Personal Protective Equipment**
- **Eye/Face Protection**
  - Tightly fitting safety goggles.
- **Skin and Body Protection**
  - Wear protective gloves/clothing.
- **Respiratory Protection**
  - If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**
- Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: White
- **Physical State**: Powder, Crystalline
- **Flash Point**: No information available
- **Boiling Point/Range**: No information available
- **Explosion Limits**: No information available
- **Molecular Weight**: 126.07
- **Evaporation Rate**: No information available
- **Vapor Pressure**: mmHG @20 deg C
- **Density**: 4.4
- **Odor**: No information available
- **Autoignition Temperature**: No information available
- **Melting point**: 101.5°C
- **Vapor Pressure**: <0.01
- **Vapor Density**: Air = 1

### 10. STABILITY AND REACTIVITY

- **Stability**: Stable under recommended storage conditions.
- **Incompatible Products**: Acid chlorides. Alkali metals. Bases.
- **Conditions to Avoid**: Contact with metals.
- **Hazardous Decomposition Products**: Carbon oxides.
- **Hazardous Polymerization**: Hazardous polymerization does not occur.

### 11. TOXICOLOGICAL INFORMATION

- **Acute Toxicity**
  - **Product Information**: Toxic. Corrosive, causes burns.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
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</thead>
<tbody>
<tr>
<td>Ethanedioic acid, dihydrate</td>
<td>7500 mg/kg (Rat)</td>
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</table>
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging
Dispose of in accordance with all federal, state and local regulations.

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14. TRANSPORT INFORMATION

DOT
Proper Shipping Name: Corrosive Solid, Acidic, Organic, N.O.S., (Containing Oxalic Acid)
Hazard Class: 8
UN-No: 3261
Packing Group: II

IATA
UN-No: 3261
Proper Shipping Name: Corrosive Solid, Acidic, Organic, N.O.S., (Containing Oxalic Acid)
Hazard Class: 8
Packing Group: II

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>DSL</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not Comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
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AICS
Complies

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
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</thead>
<tbody>
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<td>Ethanedioic acid, dihydrate</td>
<td></td>
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<td>X</td>
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International Regulations

Mexico - Grade
No information available.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

Issuing Date: 11/2/09
Revision Date

Revision Note
No information available.

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS