



Notes to physician

Treat patient symptomatically.

General advice

Avoid contact with eyes and skin. Keep out of reach of children. Immediate medical attention is required. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

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## 5. Fire Fighting Measures

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Flammable properties

Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media

Dry chemical. Water spray. Alcohol foam. Carbon dioxide.

Unsuitable extinguishing media

Not available

Protection of firefighters

Specific hazards arising from the chemical

Not available

Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

May include and are not limited to: Oxides of carbon. Formic acid

Explosion data

Sensitivity to mechanical impact

Not available

Sensitivity to static discharge

Not available

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## 6. Accidental Release Measures

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Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment

Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

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## 7. Handling and Storage

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Handling

Avoid breathing dust. Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.

Storage

Keep out of the reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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Exposure limits

Ingredient(s)

Exposure Limits

Oxalic acid

**ACGIH-TLV**

TWA: 1 mg/m<sup>3</sup>

STEL: 2 mg/m<sup>3</sup>

**OSHA-PEL**

TWA: 1 mg/m<sup>3</sup>

Engineering controls

Local exhaust recommended.

Personal protective equipment

Eye / face protection

Wear chemical goggles.

Hand protection

Impervious gloves. Confirm with reputable supplier first.

Skin and body protection

As required by employer code. Use of an impervious apron is recommended.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Crystalline.
<b>Color</b>	Colorless
<b>Form</b>	Solid.
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	1.3 (0.1M solution)
<b>Melting point</b>	214.70 °F (101.5 °C)
<b>Freezing point</b>	Not available
<b>Boiling point</b>	300.20 - 320.00 °F (149 - 160 °C)
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	1.65
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Soluble
<b>Percent volatile</b>	Not available
<b>Molecular weight</b>	126.7000

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## 10. Stability and Reactivity

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<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Caustics. Acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Formic acid
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

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## 11. Toxicological Information

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### Component analysis - LC50

<b>Ingredient(s)</b>	<b>LC50</b>
Oxalic acid	Not available

### Component analysis - Oral LD50

<b>Ingredient(s)</b>	<b>LD50</b>
Oxalic acid	375 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	Causes chemical burns. May cause blindness.
<b>Skin</b>	Causes chemical burns.
<b>Inhalation</b>	May cause respiratory tract irritation or chemical burns.
<b>Ingestion</b>	Toxic and is harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

**Sensitization** Non-hazardous by WHMIS/OSHA criteria.

**Local effects** Toxic if swallowed.

**Chronic effects** Non-hazardous by WHMIS/OSHA criteria.

**Carcinogenicity** Non-hazardous by WHMIS/OSHA criteria.

<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Synergistic Materials</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Persistence / degradability</b>	Not available
<b>Bioaccumulation / accumulation</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

## 13. Disposal Considerations

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Review federal, state/provincial, and local government requirements prior to disposal.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

### U.S. Department of Transportation (DOT)

**Basic shipping requirements:**

<b>Proper shipping name</b>	Corrosive solid, acidic, organic, n.o.s. (ETHANEDIOIC ACID, DIHYDRATE)
<b>Hazard class</b>	8
<b>UN number</b>	UN3261
<b>Packing group</b>	III
<b>Additional information:</b>	
<b>Special provisions</b>	IB8, IP3, T1, TP33
<b>Packaging exceptions</b>	154
<b>ERG number</b>	154



### Transportation of Dangerous Goods (TDG - Canada)

**Basic shipping requirements:**

<b>Proper shipping name</b>	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (ETHANEDIOIC ACID, DIHYDRATE)
<b>Hazard class</b>	8
<b>UN number</b>	UN3261
<b>Packing group</b>	III
<b>Additional information:</b>	
<b>Special provisions</b>	16



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## 15. Regulatory Information

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**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**US Federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

### CERCLA (Superfund) reportable quantity

None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**WHMIS status** Controlled

**WHMIS classification** Class D - Division 1B, Class E - Corrosive Material

### WHMIS labeling



**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

#### U.S. - Pennsylvania - RTK (Right to Know) List

Oxalic acid 6153-56-6 Present

#### U.S. - Rhode Island - Hazardous Substance List

Oxalic acid 6153-56-6 Flammable

### Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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## 16. Other Information

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### Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date** 21-Jun-2010

**Effective date** 15-Aug-2009

**Expiry date** 15-Aug-2012

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**Other information**

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.