

Revision Date: 10-17-2014

SAFETY DATA SHEET

1. Identification

Product identifier: OXALIC ACID

Other means of identification Product No.: 2752, 0230, 20803

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation Category 1C
Serious Eye Damage/Eye Irritation Category 1
Specific Target Organ Toxicity - Category 3

Single Exposure

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Causes severe skin burns and eye damage.

May cause respiratory irritation.

Precautionary Statement

Prevention: Do not breathe dust or mists. Wear protective gloves/protective clothing/eye

protection/face protection. Wash hands thoroughly after handling. Use only



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outdoors or in a well-ventilated area.

Response: Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously

with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly

closed.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*		
ETHANEDIOIC ACID, DIHYDRATE		6153-56-6	99 - 100%		

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do

NOT induce vomiting. If vomiting occurs, keep head low so that stomach

content doesn't get into the lungs.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Apply artificial

respiration if victim is not breathing Call a physician or poison control center

immediately.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Destroy or thoroughly clean contaminated shoes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Call a physician or poison control center

immediately. In case of irritation from airborne exposure, move to fresh air.

Most important symptoms/effects, acute and delayed

Symptoms: Causes severe skin and eye burns. Causes digestive tract burns. Mist or

vapor extremely irritating to eyes and respiratory tract.

Indication of immediate medical attention and special treatment needed



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Treat symptomatically. Symptoms may be delayed. **Treatment:**

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None.

Specific hazards arising from

the chemical:

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning

up:

Neutralize with lime or soda ash. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures:

Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling:

Wear protective gloves/protective clothing/eye protection/face protection. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use caution when adding this material to water. See Section 8 of the MSDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Store in a cool and well-ventilated place. Store in corrosive resistant container with a resistant inner liner. Do not store in metal containers.



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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

ccupational Exposure	Limito	T				
Chemical Identity	Туре	Exposure Limit Values	Source US. ACGIH Threshold Limit Values (2011)			
ETHANEDIOIC ACID, DIHYDRATE	TWA	1 mg/m3				
	STEL	2 mg/m3	US. ACGIH Threshold Limit Values (2011)			
	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)			
	STEL	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)			
	PEL	1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)			
	STEL	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)			
	TWA	1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)			
	TWA	1 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)			
	STEL	2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)			

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If

to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear

a full-face respirator, if needed.

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an

appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants. Do not get this material in

contact with skin. Do not get in eyes.

9. Physical and chemical properties

Appearance

Physical state: Solid
Form: Crystals



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Color: Colorless
Odor: Odorless

Odor threshold: No data available. pH: No data available.

Melting point/freezing point: 101.5 °C Initial boiling point and boiling range: 149 °C

Flash Point:

Evaporation rate:

Not applicable

No data available.

Flammability (solid, gas):

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):
Flammability limit - lower (%):
No data available.
Explosive limit - upper (%):
No data available.
No data available.
No data available.
Vapor pressure:
Vapor density:
No data available.
1.65 (18.5 °C)

Solubility(ies)

Solubility in water: 143 g/l (25 °C)
Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Other information

Molecular weight: 126.07 g/mol (C2H2O4.2H2O)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

Hazardous polymerization does not occur.

Conditions to Avoid: Avoid dust formation. Excessive heat.

Incompatible Materials: Strong bases.

Hazardous Decomposition

Products:

Thermal decomposition may release oxides of carbon.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May cause burns of the gastrointestinal tract if swallowed.

Inhalation: Irritating to respiratory system.

Skin Contact: Causes severe skin burns.

Eye contact: Causes serious eye damage.



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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 375.0 mg/kg

Dermal

Product: LD 50 (Rabbit): 20,000 mg/kg

Inhalation

Product: No data available.

Repeated Dose Toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Causes severe skin burns.

Serious Eye Damage/Eye Irritation

Product: Causes serious eye damage.

Respiratory or Skin Sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive Toxicity

Product: No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure

Product: Respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure

Product: None known.

Aspiration Hazard

Product: Not classified

Other Effects: None known.



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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: There are no data on the degradability of this product.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in Soil: No data available.

Other Adverse Effects: The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills

can have a harmful or damaging effect on the environment.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.



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14. Transport information

DOT

UN Number: UN 3261

UN Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.(OXALIC ACID,

DIHYDRATE)

Transport Hazard Class(es)

Class(es): 8
Label(s): 8
Packing Group: III
Marine Pollutant: No

IMDG

UN Number: UN 3261

UN Proper Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.(OXALIC ACID,

DIHYDRATE)

Transport Hazard Class(es)

 Class(es):
 8

 Label(s):
 8

 EmS No.:
 F-A, S-B

Packing Group: III
Marine Pollutant: No

IATA

UN Number: UN 3261

Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s. (OXALIC ACID,

DIHYDRATE)

Transport Hazard Class(es):

Class(es): 8
Label(s): 8

Marine Pollutant: No
Packing Group: III

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Х	Acute (Immediate)	Chronic (Delayed)	Fire	Reactive	Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.



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SARA 311/312 Hazardous Chemical

Chemical IdentityThreshold Planning QuantityOXALIC ACID500 lbsETHANEDIOIC ACID,500 lbsDIHYDRATE

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

ETHANEDIOIC ACID, Listed

DIHYDRATE

OXALIC ACID Listed

US. Massachusetts RTK - Substance List

ETHANEDIOIC ACID, Listed

DIHYDRATE

OXALIC ACID Listed

US. Pennsylvania RTK - Hazardous Substances

ETHANEDIOIC ACID, Listed

DIHYDRATE

OXALIC ACID Listed

US. Rhode Island RTK

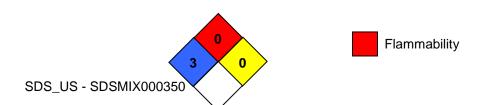
OXALIC ACID Listed

Inventory Status:

Australia AICS: On or in compliance with the inventory On or in compliance with the inventory Canada DSL Inventory List: EINECS, ELINCS or NLP: On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Canada NDSL Inventory: Not in compliance with the inventory. Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Japan ISHL Listing: On or in compliance with the inventory Japan Pharmacopoeia Listing: Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

NFPA Hazard ID





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Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date: 10-17-2014

Revision Date: No data available.

Version #: 1.0

Further Information: No data available.

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