Safety Data Sheet Oxalic Acid, 2% Aqueous

Section 1 - Chemical Product and Company Identification

 SDS Name: Oxalic Acid, 2% Aqueous
Catalog Numbers: SO-389, A-104-7, C-201-7, K-693-6, K-697-6
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc. 10 ELECTRONICS AVENUE DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H314-Skin corrosion/irritation: 1A H318-Serious eye damage/eye irritation: 1

2% of the mixture consists of ingredients of unknown acute inhalation toxicity.

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

Hazard Statements:

H314-Causes severe skin burns and eye damage H318-Causes serious eye damage

Precautionary Statements:

P260-Do not breathe dust/fume/gas/mist/vapours/spray.P264-Wash thoroughly after handling.P280-Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting. P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310-Immediately call a Poison Center/doctor.

P363-Wash contaminated clothing before reuse.

P405-Store locked up.

P501-Dispose of contents/container in accordance with local/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
6153-56-6	Oxalic acid dihydrate	2 w/v
7732-18-5	Water	balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical advice.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical advice.

Oral Exposure: If swallowed, seek immediate medical advice. Rinse mouth with water and drink small quantities of water (stop if the exposed person feels sick as vomiting may be dangerous).

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, irritating fumes and gases.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Wear personal protective equipment. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store in a tightly closed container in a cool, dry, and well-ventilated area. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Oxalic Acid Dihydrate	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA
CAS#6153-56-6	2 mg/m3 STEL	2 mg/m3 STEL	

Physical State: Liquid **Appearance:** Clear, colorless **Odor:** Odorless Vapor Pressure: Not available Odor Threshold: Not available Vapor Density: Not available **pH:** 1.03-1.23 **Relative Density:** Not available Melting point/freezing point: Not available **Solubility:** Soluble in water **Boiling Point:** Not available Flash Point: Not available **Evaporation Rate:** Not available Flammability (solid, gas): Not available **Partition coefficient: n-octanol/water:** Not available **Autoignition Temperature:** Not available **Decomposition Temperature:** Not available Viscosity: Not available Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, metals, alkalis, and acid chlorides. Note: May attack metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.

Hazardous Decomposition Products: Carbon oxides, irritating fumes and gases.

Section 11 - Toxicological Information

CAS#6153-56-6 Oxalic Acid Dihydrate:

LD50, Oral: 375 mg/kg (rat) LD50, Dermal: 1100.1 mg/kg (expert judgement) LC50, Inhalation: Not available

Carcinogenicity: Oxalic Acid CAS#6153-56-6 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available **Teratogenicity:** Not available

Reproductive Effects: Not available Developmental Effects: Not available Neurotoxicity: Not available Mutagenicity: Not available Specific Target Organ Toxicity, Single Exposure: Not available. Specific Target Organ Toxicity, Repeated Exposure: Kidney and liver.

Symptoms associated with exposure: Corrosive material. Causes severe skin burns and eye damage. If ingested, severe burns of the mouth and throat, and danger of perforation of the esophagus and stomach. May cause stomach pains, nausea, vomiting if ingested. May cause kidney and/or liver damage. Skin contact may result in pain, irritation, blisters, redness. Inhalation may cause cough, shortness of breath. Eye contact may cause pain, watering, redness, severe burns.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#6153-56-6 Oxalic Acid Dihydrate:

EC50, algae: 19.14 mg/L 72h EC50, water flea: 162.2 mg/L 48h (daphnia magna) LC50, fish: 160 mg/L 48h (leuciscus idus, golden orfe).

Persistence and degradability: Persistence is unlikely based on available information.Bio-accumulative potential: Not available.Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT Proper shipping name: Corrosive Liquid, Acidic, Organic, N.O.S. (Oxalic Acid Dihydrate) UN3265 PG III Hazard Class 8

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 5-11-12 **Revision #1:** 1-29-14 YM **Revision #2:** 10-7-21 **Revision #3:** 2-13-23

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.