### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

# Oxalic Acid Dihydrate

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Oxalic acid dihydrate Synonym: Ethandionic acid CAS#: 6153-56-6

SECTION 3 — HAZARDS IDENTIFICATION	
Colorless to white, crystalline solid. Odorless. Moderately toxic by ingestion and inhalation. Corrosive to all body tissues. Permeator. Will cause burns and blistering to skin, eyes, and mucous membranes. Avoid all body contact. Avoid breathing the dust.	FLINN AT-A-GLANCE Health-3 Flammability-1 Reactivity-1 Exposure-2 Storage-0 0 is low hazard, 3 is high hazard
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### SECTION 4 — FIRST AID MEASURES

Immediately call a physician and seek medical attention for further treatment, observation, and support after first aid. Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately. Call a physician or poison control at once.

Eye or External: Immediately flush with fresh water for at least 15 minutes. Call a physician or poison control at once. Internal: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES	
Combustible solid.	NFPA CODE
Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and	H-3
SCBA with full facepiece operated in positive pressure mode.	F-1
	<b>R-0</b>

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Wear complete PPE. Avoid creating dust cloud. Ventilate area. Wipe up, place in sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

#### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic 1. Store with acids, anhydrides and peracids. Store in a cool dry place. Use and dispense in a hood.

#### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines for oxalic acid (CAS # 114-62-7): PEL 1 mg/m<sup>3</sup>, STEL 2 mg/m<sup>3</sup> (OSHA, ACGIH)

# SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless to white, odorless crystalline solid. Solubility: Partially soluble in cold water or alcohol. Formula:  $H_2C_2O_4$  2 $H_2O$ Formula weight: 126.07

# SECTION 10 - STABILITY AND REACTIVITY

Avoid contact with bases, acid chlorides, alkali metals, corrodes steel. Shelf life: Indefinite, if stored properly.

## SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: **Toxic, corrosive**, dermatitis, **may be FATAL** Chronic effects: Damaging to many organs and organ systems Target organs: Kidneys, nervous system, skin, eyes, brain, heart ORL-RAT  $LD_{50}$ : 7500 mg/kg IHL-RAT  $LC_{50}$ : N.A. SKN-RBT  $LD_{50}$ : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

# SECTION 12 — ECOLOGICAL INFORMATION

LC<sub>50</sub> Bluegill: 4000 mg/l 24 hours

## SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding. Flinn Suggested Disposal Method #24a is one option.

## SECTION 14 — TRANSPORT INFORMATION

Shipping name: Corrosive Solids, Toxic, N.O.S Hazard class: 8 UN number: UN2923 N/A = Not applicable

## SECTION 15 — REGULATORY INFORMATION

Not listed.

## SECTION 16 — OTHER INFORMATION

This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

# Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

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Melting point: 101.5 °C (dihydrate) pH: alkaline Specific gravity: 1.653