

PRODUCT IDENTIFICATION



Product Name: Oxalic Acid, Dihydrate - Ethanedioic Acid Technical Grade

CAS Number: 6153-56-6

Molecular Formula: $C_2H_6O_6$

Molecular Weight: 126.07 g/mol

Grade: Technical Grade

Purity / Concentration: Not Available

Synonyms: Ethanedioic Acid, Oxalic Acid Dihydrate

PRODUCT OVERVIEW

Oxalic Acid Dihydrate (Ethanedioic Acid) is a high-purity Technical Grade solid featuring a 99.7% assay concentration. This versatile colorless crystalline acid is widely utilized for heavy-duty cleaning, rust removal, and pH adjustment across various industrial sectors.

Grade Significance: Technical Grade indicates that this product is manufactured to meet industrial performance standards, offering a cost-effective solution where high purity is required but food or pharmaceutical certifications are not necessary.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay	%	99.7	99.5	100.5	Titration/Gravimetric
Non-Volatile Residue	%	0.0030	—	0.01	Residue on Ignition
Heavy Metals As Pb	ppm	3	—	10	ICP-MS (as Pb)
Iron	ppm	3	—	10	ICP
Chloride Cl	ppm	6	—	20	ICP
Sulfate (SO_4^{2-})	%	0.0030	—	0.01	ICP-MS
Insoluble Matter	%	0.03	0	0.1	Gravimetric

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless crystals	Odor	Odorless
Form	Solid	Melting / Freezing Point	101-102 °C
Specific Gravity	1.653	Solubility	Soluble in water, alcohol, and ether
Molecular Formula	$C_2H_6O_6$	Molecular Weight	126.07 g/mol
Density (25°C)	1.65 g/mL		

APPLICATIONS

- Metalworking** — Used extensively for the removal of rust and scale from metal surfaces to restore equipment integrity.
- Laboratory Analysis** — Serves as a reliable reagent in analytical titrations and standard chemical procedures.
- Chemical Manufacturing** — Utilized as a potent oxidizing agent in various complex synthesis reactions.
- Water Treatment** — Applied in industrial water treatment processes to effectively adjust and stabilize pH levels.

STORAGE & HANDLING

Oxalic acid should be stored in a cool, dry, and well-ventilated area away from incompatible substances to prevent degradation. Proper containment is critical because the material is harmful if swallowed or in contact with skin, necessitating strict adherence to safety protocols to prevent accidental exposure.

- Store in a cool, dry place away from direct sunlight.
- Use appropriate personal protective equipment (PPE) such as gloves and goggles.
- Keep container tightly closed when not in use to prevent moisture absorption.
- Incompatible with strong bases and strong oxidizing agents.
- Ensure proper ventilation when handling to avoid inhalation of dust.

AVAILABLE PACKAGING

- 2 lbs.
- 5 Lbs.
- 55 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H302: Harmful if swallowed
- H312: Harmful in contact with skin
- H315: Causes skin irritation
- H318: Causes serious eye damage
- H373: May cause damage to organs through prolonged or repeated exposure

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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