Safety Data Sheet · OSHA HCS 2024

Oxalic Acid ACS Grade

ACS Grade

Standard	Revised	Emergency
OSHA HCS 2024 · GHS Rev. 7	2026-11-12	Chemtel 1-800-255-3924 (24/7)

1 Identification

Product Identifier	Oxalic Acid ACS Grade
Grade	ACS Grade
CAS Number	6153-56-6
Chemical Formula	C2H2O4 · 2H2O
Molecular Weight	126.07 g/mol
Manufacturer	Alliance Chemical 204 South Edmond Street, Taylor, TX 76574
Emergency Phone	Chemtel 1-800-255-3924 (24/7)
Recommended Use	Industrial / laboratory chemical. See Section 7.
Restrictions on Use	No restrictions identified beyond the conditions of safe use in Sections 7 and 8.

2 Hazard Identification



Corrosive



Irritant / harmful



Health hazard

Classification

Acute toxicity (oral), Category 4
Acute toxicity (dermal), Category 4
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1
Specific target organ toxicity, repeated exposure, Category 2

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

Precautionary Statements

P260 Do not breathe dust, fume, gas, mist, vapors or spray.
P264 Wash hands and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves, protective clothing, and eye/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.

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 or doctor.

P313 Get medical advice or attention.

P314 Get medical advice or attention if you feel unwell.

P321 Specific treatment (see first-aid information on this label).

P330 Rinse mouth.

P362 Take off contaminated clothing and wash before reuse.

P501 Dispose of contents and container in accordance with local, regional, national, and international regulations.

Classification, hazard (H) and precautionary (P) statements and pictograms per OSHA HCS 2024 (29 CFR 1910.1200, Appendices A–C), aligned with GHS Rev. 7.

3 Composition / Information on Ingredients

Component	CAS No.	Formula	Concentration
Oxalic Acid Dihydrate	6153-56-6	C2H2O4·2H2O	99.5-100% w/w

Concentrations are nominal; lot-specific values appear on the Certificate of Analysis. Components not contributing to classification are omitted.

4 First-Aid Measures

Eyes

Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.

Skin

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.

Inhalation

Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion

Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

Most Important Symptoms and Effects

Eye contact causes serious eye damage: pain, redness and corneal injury, which may be permanent.

Skin contact causes irritation: redness, itching and pain; repeated contact may dry and crack the skin.

Ingestion may cause nausea, vomiting and abdominal pain; larger amounts may cause systemic poisoning.

Absorption through the skin may cause systemic poisoning.

Immediate Medical Attention and Special Treatment

Immediate medical attention is required after eye contact; eye damage may continue after exposure ends.

5 Fire-Fighting Measures

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical	Containers may rupture when heated.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Hazardous Combustion Products	Carbon monoxide and carbon dioxide; may also form formic acid on heating.

6 Accidental Release Measures

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Sweep or vacuum up, avoiding dust. Collect in appropriate waste container. Dispose per applicable regulations.

7 Handling and Storage

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.
Specific Storage Precautions	Keep containers tightly closed in a cool, dry, well-ventilated place and protect from moisture (hygroscopic); store locked up. Minimize dust generation and accumulation.

8 Exposure Controls / Personal Protection

Occupational Exposure Limits

Limit	Value
OSHA PEL	1 mg/m³ TWA
NIOSH REL	1 mg/m³ TWA / 2 mg/m³ STEL
IDLH	500 mg/m³

Engineering Controls	Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.
Eye/Face Protection	Wear chemical safety goggles or face shield.
Skin Protection	Wear chemical-resistant gloves and protective clothing.
Respiratory Protection	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

Exposure limits sourced from NIOSH Pocket Guide, OSHA 29 CFR 1910.1000 and ACGIH TLVs.

9 Physical & Chemical Properties

Appearance	Colorless to white crystals
Odor	Odorless
Odor Threshold	No data available
pH	No data available

Melting Point / Freezing Point	101.5 °C (214.7 °F)
Boiling Point	Not applicable (loses water of hydration, then decomposes)
Flash Point	Not applicable (non-flammable)
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	Negligible at 20 °C
Vapor Density	No data available
Relative Density	1.653
Solubility	Soluble in water (13-14 g/100 mL at 20 °C) and alcohol
Partition Coefficient (n-octanol/water)	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	No data available
Form	Solid
Density	1.653 g/cm3

Values shown reflect product-specific canonical data. Lot-specific ranges may vary; see the Certificate of Analysis for the shipped lot.

10 Stability and Reactivity

Reactivity	Not reactive under normal conditions of use and storage.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Dust formation (fine dust can form explosive mixtures with air); moisture; heat, flames and sparks.
Incompatible Materials	Strong oxidizing agents; strong bases and alkalis; metals; acid chlorides; chlorites and hypochlorites; silver compounds (explosive silver oxalate); furfuryl alcohol.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide; may also form formic acid on heating.

11 Toxicological Information

See Section 2 for GHS hazard classification.

Likely Routes of Exposure	Inhalation, skin contact, eye contact, ingestion.
Symptoms	Eye contact causes serious eye damage: pain, redness and corneal injury, which may be permanent. Skin contact causes irritation: redness, itching and pain; repeated contact may dry and crack the skin. Ingestion may cause nausea, vomiting and abdominal pain; larger amounts may cause systemic poisoning. Absorption through the skin may cause systemic poisoning.

Delayed and Chronic Effects	Prolonged or repeated exposure may damage organs. Repeated skin contact may cause dermatitis (dry, cracked skin).
Numerical Measures of Toxicity	No data available

Carcinogen Classification

Agency	Status
IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12 Ecological Information

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence & Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available

13 Disposal Considerations

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14 Transport Information

Not regulated for transport under US DOT 49 CFR Subchapter C, IMDG, or IATA DGR.

15 Regulatory Information

Inventory / List	Status
California Proposition 65	Not listed
US EPA TSCA Active Inventory	Listed
EPCRA SARA 313 (TRI)	Not listed

SARA 311/312 hazard categories correspond to the GHS classification in Section 2. Data retrieved as of: California Proposition 65 2026-11-02; US EPA TSCA Active Inventory 2026-11-02; EPCRA SARA 313 (TRI) 2026-11-02.

16 Other Information

Revision Date	2026-11-12
Format	16-section format per OSHA HCS 2024 (29 CFR 1910.1200, Appendix D), aligned with GHS Rev. 7.

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