



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Oxalic Acid

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Oxalic Acid
SDS Number: R-034
Product Code: 515870-1, 515870-5, 515870-10, 515870-25, 515870-50
CAS Number: 144-62-7
Chemical Formula: C₂H₂O₄
Supplier Details: High Valley Products, Inc.
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

- Health, Acute toxicity, 4 Oral
- Health, Acute toxicity, 4 Dermal
- Health, Serious Eye Damage/Eye Irritation, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:



GHS Hazard Statements:

- H302 - Harmful if swallowed
- H312 - Harmful in contact with skin
- H318 - Causes serious eye damage

GHS Precautionary Statements:

- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
144-62-7	100%	oxalic acid

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FIRST AID MEASURES

Inhalation:	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Wash with soap and water. Consult a physician.
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
No data available

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
No data

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ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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HANDLING AND STORAGE

Handling Precautions: Precautions for safe handling:
Avoid contact with eyes, skin, or clothing.
Avoid formation of dust.
Use adequate ventilation.
See section 8 for recommendations on the use of personal protective equipment.

Storage Requirements: Keep container tightly closed. Store in cool/dry well-ventilated area.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment: Oxalic acid (144-62-7) []

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through

time: 480 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) Splash contact data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Oxalic acid (144-62-7) []

Components with workplace control parameters

TWA 1 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Eye, skin, & Upper Respiratory Tract irritation

STEL 2 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Eye, skin, & Upper Respiratory Tract irritation

TWA 1 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
1910.1000

STEL 2 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
1910.1000

TWA 1 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1
Limits for Air Contaminants

TWA 1 mg/m3 USA. NIOSH Recommended Exposure Limits

ST 2 mg/m3 USA. NIOSH Recommended Exposure Limits

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White Powder.	Odor:	None
Physical State:	Powder	Molecular Formula:	C2H2O4
Odor Threshold:	No data available	Solubility:	ca. 1g/7mL of water
Spec Grav./Density:	1.65 @ 18.5C/4C	Freezing/Melting Pt.:	101.5C (216F)
Viscosity:	No data available	Flash Point:	No data available
Boiling Point:	149-160C (300-320F)	Vapor Density:	4.4
Partition Coefficient:	No data available	Auto-Ignition Temp:	No data available
Vapor Pressure:	<0.001 @20C (68F)	UFL/LFL:	No data available
pH:	No data available		
Evap. Rate:	No data available		
Decomp Temp:	No data available		

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STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Moisture.
Materials to Avoid:	Metals

Hazardous Decomposition: Carbon oxides.
Hazardous Polymerization: No data available.

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TOXICOLOGICAL INFORMATION

Oxalic acid (144-62-7) []

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - female - 1,080 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: Skin - rabbit - No skin irritation - OECD Test Guideline 404

Serious eye damage/eye irritation: Eyes - rabbit - Risk of serious damage to eyes. - 24 h - OECD Test Guideline 405

Respiratory or skin sensitisation: mouse - Does not cause skin sensitisation.

Germ cell mutagenicity: Genotoxicity in vitro - S. typhimurium - with and without metabolic activation - negative

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity - mouse - Oral:

Effects on Fertility: Other measures of fertility Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Teratogenicity: Possible risk of congenital malformation in the fetus.

Specific target organ toxicity - single exposure (Globally Harmonized System):
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

Repeated dose toxicity - Lowest observed adverse effect level - 150 mg/kg RTECS: RO2450000

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ECOLOGICAL INFORMATION

Oxalic acid (144-62-7) []

Information on ecological effects

Toxicity:

Toxicity to fish static test LC50 - *Leuciscus idus melanotus* - 160 mg/l - 48 h.

static test LC50 - *Leuciscus idus melanotus* - 325 mg/l - 48 h

Toxicity to daphnia Immobilization EC50 - *Daphnia magna* (Water flea) - 162.2 mg/l - 48 h.

and other aquatic Method: OECD Test Guideline 202 invertebrates

Persistence and degradability: Biodegradability aerobic Result: 89 % - Readily biodegradable.

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

13 DISPOSAL CONSIDERATIONS

Oxalic acid (144-62-7) []

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product in accordance with local regulations.

14 TRANSPORT INFORMATION

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Oxalic acid (144-62-7) [n/a%] MASS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List

OSHA = OSHA workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

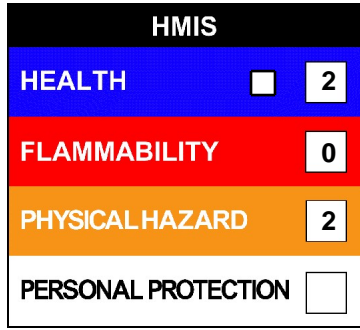
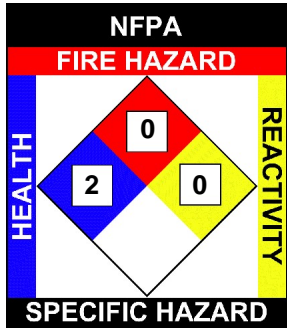
TSCA = Toxic Substances Control Act

TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

NFPA: Health = 2, Fire = 0, Reactivity = 0, Specific Hazard = n/a

HMIS III: Health = 2, Fire = 0, Physical Hazard = 2



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