



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Citric Acid Anhydrous

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Citric Acid Anhydrous
Synonyms: 2-Hydroxy-1,2,3-propanetricarboxylic acid
SDS Number: R-002
Product Code: 512990-1; 512990-5; 512990-10; 512990-25; 512990-50
Revision Date: 8/4/2015
Version: 1.0
CAS Number: 77-92-9
Chemical Family: Organic Acid
Chemical Formula: C6H8O7
Product Use: Clarifying agent, water softener, buffer, foam booster and stabilizer, complexion agent and as an intermediate in production of organic chemicals, cosmetic products, cleaning products.

Supplier Details: High Valley Products, Inc.
1134 West 850 North
Centerville, Utah 84014

Emergency: PERS: 800-633-8253
Phone: 801-295-9591
Email: sales@hvchemical.com
Web: www.hvchemical.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):
Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H319 - Causes serious eye irritation

GHS Precautionary Statements:

P264 - Wash _ thoroughly after handling.
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.
P337+313 - Get medical advice/attention.

Hazards not otherwise classified (HNOC) or not covered by GHS

Route of Entry: Eyes; Ingestion; Inhalation; Skin;

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
77-92-9	>99.5%	Citric Acid

4 FIRST AID MEASURES

- Inhalation:** If inhaled, remove to fresh air and call a physician for instructions. In case of difficulty breathing, use oxygen assistance. Get medical attention if condition is critical.
- Skin Contact:** This product could be skin irritant resulting in reddening, stinging, and swelling when contact is frequent or skin sensible. Promptly flush skin with water until all chemical is removed. Get medical attention if needed.
- Eye Contact:** This product is irritating to the eyes resulting in eddening, stinging, and swelling when contact is frequent or skin sensible. Flush with large amounts of water. Get immediate medical attention.
- Ingestion:** If swallowed , wash the mouth with plenty of water and give water to drink. If person is unconscious DO NOT give anything to drink. DO NOT induce vomiting. Get medical attention.

5 FIRE FIGHTING MEASURES

Extinguishing Media: Water Spray, carbon dioxide, dry chemical powder.

Specific hazards: This is solid organic acid and can burn under adequate temperature. High dust concentration would be hazardous in closed areas and direct flame. Burning of product could produce irritant/toxic fumes as monoxide or dioxide of carbon.

Personal protection: Firemen should wear complete personal protective equipment, including portable self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Vacuum or sweep the material into a bag or other sealed container and dispose in accordance with local requirements.

7 HANDLING AND STORAGE

- Handling Precautions:** Wash clothing before reuse and decontaminate or discard contaminated shoes. Avoid contact with eyes, skin, or clothing.
Do not eat, drink or smoke during handling or working with this product.
- Storage Requirements:** Store in cool/dry area.

Engineering Controls: Use local ventilation if dusting is a problem. To maintain air levels below the recommended exposure limit mechanical ventilation may need to be used.

Personal Protective Equipment: 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [>99.5%]
 Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min
 Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) 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.

Body Protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [>99.5%] : no data available

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Free flowing crystals or powder.	Odor:	Odorless or maple lactone odor.
Physical State:	Crystals	Molecular Formula:	C6H8O7
Odor Threshold:	8 ppm (furfural alcohol as odor reference)	Solubility:	Soluble in water, alcohol and moderately
Spec Grav./Density:	1.542 g/cm3	Freezing/Melting Pt.:	153 °C (with decomposition)
Viscosity:	No data available	Flash Point:	No data available
Boiling Point:	No data available	Vapor Density:	No data available
Partition Coefficient:	No data available	Bulk Density:	897 kg/m3 (granular product)
Vapor Pressure:	No data available	Auto-Ignition Temp:	1010 °C
pH:	2.2 1% solution	UFL/LFL:	No data available
Evap. Rate:	No data available		
Molecular weight:	192.13		
Decomp Temp:	No data available		

Reactivity:	Stable material
Chemical Stability:	Complex could occur with metals.
Materials to Avoid:	Strong Bases (causes exothermic reaction);
Hazardous Decomposition:	In case of fire CO, CO2 and other potentially toxic fumes.
Hazardous Polymerization:	Will not occur.

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [>99.5%]

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 5,400 mg/kg (OECD Test Guideline 401)

Inhalation: no data available

LD50 Dermal - rat - > 2,000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation: Skin - rabbit Result: Mild skin irritation (OECD Test Guideline 404)

Serious eye damage/eye irritation: Eyes - rabbit Result: Irritating to eyes. (OECD Test Guideline 405)

Respiratory or skin sensitisation: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: no data available

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: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: GE7350000

Vomiting, Diarrhoea, Damage to tooth enamel., Dermatitis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [>99.5%]

Information on ecological effects

Toxicity:

Toxicity to fish mortality LC50 - *Leuciscus idus melanotus* - 440 mg/l - 48 h.

(OECD Test Guideline 203)

Toxicity to daphnia and static test - *Daphnia magna* (Water flea) - 1,535 mg/l - 24 h.

other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [>99.5%]

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.

Contaminated packaging: Dispose of as unused product.

Non DOT regulated.

Component (CAS#) [%] - CODES

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) [n/a%] TSCA

Regulatory CODE Descriptions

TSCA = Toxic Substances Control Act

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

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



HMIS	
HEALTH	<input type="checkbox"/> 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	<input type="checkbox"/>

Disclaimer:

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