

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Citric Acid, 1.00 Molar

Product Number: 2131 Other Identifying Product Numbers: 2131-1, 2131-16, 2131-32

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive Arlington, TX 76012 USA Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

	Hazard		
Hazard Class	Category	Statement	Precautionary Statements
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310

2.2. GHS Label Elements

Pictograms:



Signal Word: Danger

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Hazard Statements:

Hazard Number	Hazard Statement
H318	Causes serious eye damage.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P280	Wear protective gloves and eye protection.
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 physician.

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H₂O	18.01 g/mol	7732-18-5	82.17%
Citric Acid	$C_6H_8O_7$	192.12 g/mol	77-92-9	17.83%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause slight irritation.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May cause irritation, redness, and pain.

 $\label{eq:index} \textbf{Ingestion:} \quad \text{Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.}$

4.2. Most Important Symptoms and Effects, Acute and Delayed

Does not present any significant health hazards. May cause slight irritation to areas of contact. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause irritation, redness, and pain.



4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Dry chemical, carbon dioxide, foam, water spray

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Refrigeration will help maintain the strength of this solution.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

Chemical Name	Limit Type Country	Exposure Limit	Information Source
Data not available.			

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance:	Colorless liquid
Physical State:	Liquid
Odor:	Data not available.
Odor Threshold:	Data not available.
pH:	< 2
Melting/Freezing Point:	Approximately 0°C
Initial Boiling Point /Range:	Approximately 100°C - Approximately 100°C
Flash Point:	Data not available.
Evaporation Rate:	Data not available.
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Vapor Pressure:	Data not available.
Vapor Density:	Data not available.
Relative Density:	1.08
Solubility:	Miscible
Partition Coefficient (n-Octanol/Water):	Data not available.
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
Viscosity:	Data not available.
ExplosiveProperties:	Data not available.
Oxidizing Properties:	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Potentially explosive reaction with metal nitrates.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: (Citric Acid) 3 gm/kg, details of toxic effects not reported other than lethal dose value. Skin irritation, rabbit: 500 mg/24H, mild; Eye irritation, rabbit: 750 µg/24H, severe.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.



SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

- **12.2. Persistence and Degradability** Data not available.
- 12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.



Not regulated according to IATA Regulations.

SECTION 15: Regulatory Information

- 15.1. Occupational Safety and Health Administration (OSHA) Hazards Not listed.
- 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Not listed.
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI) Not listed.
- 15.5. Massachusetts Right-to-Know Substance List

Not listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

Water (CAS # 7732-18-5): Present

- 15.7. New Jersey Worker and Community Right-to-Know Components Not listed.
- 15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Citric Acid (CAS # 77-92-9): Present (DSL) Water (CAS # 7732-18-5): Present (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

Citric Acid (CAS # 77-92-9): Present Water (CAS # 7732-18-5): Present



15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP) Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Causes serious eye damage.

Wear protective gloves and eye protection.

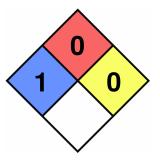
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable. Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable. Health Hazards Not Otherwise Classified (HHNOC): Not Applicable. Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1 Flammability: 0 Reactivity: 0 Special Hazard:





16.4. Document Revision

Last Revision Date: 5/4/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.