

## Safety Data Sheet


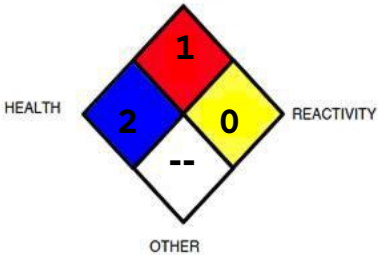
### Section 1: Product & Company Identification

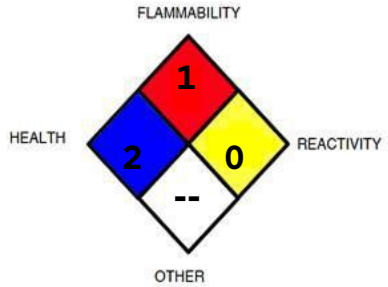
<b>Product Name:</b>	Citric Acid Monohydrate, ACS Grade
<b>Product #:</b>	C-2763
<b>Synonyms:</b>	Citric acid, Anhydrous Citric Acid
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Citric acid monohydrate	5949-29-1	201-069-1	100

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Skin:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>Eyes:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
	See section 11 for more detailed information on health effects & symptoms

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Hazardous thermal (de)composition products:</b>	Carbon oxides
<b>Special Fire Fighting Procedures:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Flash Point:</b>	173.9°C (345°F) - closed cup

## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust.
<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Clean-up:</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 13: Non-Combustible Solids
<b>Handling:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

## SECTION 8: Exposure controls / Personal Protection

### 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).

### Skin and Body:



Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's 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

	<p>Minimum layer thickness: 0.11 mm            Break through time: 480 min            Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)</p> <p>Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</p>
<b>Eyes:</b>	 <p>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).</p>
<b>Ventilation/Engineering Measures:</b>	Provide appropriate exhaust ventilation at places where dust is formed.
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Other:</b>	Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	White crystalline powder
<b>Formula</b>	$C_6H_8O_7 \cdot H_2O$
<b>Molecular Wt.</b>	210.14
<b>Melting Pt.</b>	100°C
<b>Boiling Pt.</b>	175°C
<b>Density:</b>	1.54 g/cm <sup>3</sup>
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	7.26 - (Air = 1.0)
<b>Solubility:</b>	Water
<b>Flash Point:</b>	173.9°C (345.0°C)
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
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<b>Hazardous decomposition products:</b>	Hazardous decomposition products formed under fire conditions: Carbon oxides
<b>Materials to Avoid:</b>	Oxidizing agents, Bases, Reducing agents, Nitrates
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	GE7810000
<b>ACUTE Toxicity:</b>	Dermal: No data available LD50 Intraperitoneal - Rat - 375 mg/kg
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	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. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or, anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or, potential human carcinogen by OSHA. EPA: No classification on carcinogenic data is available from EPA

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	No data available
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated Packaging:</b>	Dispose of as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not dangerous goods
<b>DOT regulations:</b>	Not dangerous goods
<b>IMDG/IMO (SEA):</b>	Not dangerous goods
<b>IATA/DGR (AIR):</b>	Not dangerous goods
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H319 Causes serious eye irritation
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ eye protection/ face 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. P337 + P313 If eye irritation persists: Get medical advice/ attention.
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: No products found California Proposition 65: No products found Pennsylvania State Right to Know: Citric acid monohydrate (CAS 5949-29-1) New Jersey State Right to Know: Citric acid monohydrate (CAS 5949-29-1)
<b>U.S. Federal Regulations:</b>	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

	<p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: No Products were found.</p>
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*