

Section 1: Product & Company Information

Product Identifier: AquaLife CitriClean

Other Means of Identification: Citric acid anhydrous
Product Number:

Recommended Use and Restrictions on Use

Recommended Use: For use in cleaning aquarium accessories and equipment.

Restrictions on Use: Not to be used inside the aquarium.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: Aquarium Life Support Systems
1737 Louisville Dr
Knoxville, TN 37921
USA

Information Telephone Number: 865/588-0108

Fax Number: 865/588-1976

Website: www.aqualifesupport.com

E-mail: cs@aqualifesupport.com

Emergency Phone Number: 865/588-0108

Section 2: Hazards Identification

GHS Hazard Classification(s)

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical Hazard(s): Serious Eye Damage/Eye Irritation

Health Hazard(s): Specific target organ toxicity (single exposure)

Environmental Hazard(s): Not classified

Label Elements

Signal Word: Warning

Hazard Symbol(s): No symbol

Hazard Statement(s): Not applicable

Precautionary Statements

Prevention: Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention.

Storage: Store in a well-ventilated place. Keep container tightly closed Store locked up

Disposal: Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified: (HNOC) May form combustible dust concentrations in air.

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity	CAS #	Weight %
Citric acid	77-92-9	>95

Section 4: First Aid Measures

General Information

Magnesium Chloride, hexahydrate is a deliquescent, white solid in prilled form. Dusts of this product may cause irritation to the eyes, skin, throat, and nose. Magnesium Chloride hexahydrate is not combustible. Use extinguishing media appropriate for the surrounding fire. Thermal decomposition of this product produces irritating vapors and toxic gasses (e.g. hydrogen chloride, chlorine) Emergency responders should wear proper personal protective equipment for the releases to which they are responding.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Ingestion

DO NOT INDUCE VOMITING. Obtain medical attention.

Most important symptoms/effects, acute and delayed

No information available

Section 5: Fire Fighting Measures

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

Unsuitable Extinguishing Media No information available.

Flash Point 345°C / 653°F

Method - No information available.

Autoignition Temperature 1000°C / 1832°F

Explosion Limits: Upper - No data available.

Lower: No data available

Oxidizing Properties: Not oxidising

Sensitivity to mechanical impact: No information available.

Sensitivity to static discharge: No information available.

Specific Hazards Arising from the Chemical

Dust can form an explosive mixture in air. Keep product and container away from heat and sources of ignition.

Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health 2

Flammability 1

Instability 0

Physical Hazards N/A

Section 6: Accidental Release Measures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional ecological information.

Methods for Containment and CleanUp

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. 7. Handling and storage Handling Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Section 7: Handling and Storage

Handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Section 9: Physical and Chemical Properties

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available.
pH	1.7 (10 % Solution)
Melting Point/Range	153°C / 307.4°F
Boiling Point/Range	No information available.
Flash Point	345°C / 653°F
Evaporation Rate	Not applicable
Flammability (solid, gas)	No information available.
Flammability or explosive limits	
Upper	No data available
Lower	No data available

Vapor Pressure	No information available.
Vapor Density	Not applicable
Relative Density	No information available.
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	1000°C / 1832°F
Decomposition temperature	No information available.
Viscosity	Not applicable
Molecular Weight	Molecular Formula C ₆ H ₈ O ₇ 192.13

Section 10: Stability and Reactivity

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid dust formation. Incompatible products. Excess heat. Temperatures above 170°C.
Incompatible Materials	Strong oxidizing agents, Strong bases.
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

Section 11: Toxicological Information

Information on routes of exposure	
Ingestion:	No information available.
Inhalation:	May cause respiratory tract irritation.
Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.
Information on Toxicological Effects	
Acute Toxicity (List all possible routes of exposure)	
Oral	
Citric Acid	: LD50 (Rat) 3000 mg/kg (Rat)
Dermal	>2 g/kg (Rat)
Inhalation	No Data Available
Repeated Dose Toxicity	No data Available
Skin Corrosion/Irritation	May cause skin irritation
Serious Eye Damage/Eye Irritation	May cause eye irritation
Respiratory/Skin Sensitization	May cause respiratory tract irritation.
Carcinogenicity	Not listed
Germ Cell Mutagenicity	No mutagenic components identified.
Reproductive Toxicity	None known.
Specific Target Organ Toxicity – Single Exposure	None known.
Specific Target Organ Toxicity – Repeated Exposure	None known.
Aspiration Hazard	Not classified.
Other Effects	None known.

Section 12: Ecological Information

Chronic Hazards to the Aquatic Environment	
Fish	No data available.
Aquatic Invertebrates	No data available.
Toxicity to Aquatic Plants	No data available.
Persistence and Degradability	
Biodegradation	Soluble in water, Persistence is unlikely, based on information available
Bioaccumulative Potential	
Bioconcentration Factor (BCF)	No data available on bioaccumulation.
Partition Coefficient n-octanol / water (log Kow)	No data available.
Mobility in Soil	The product is water soluble and may spread in water systems.
Other Adverse Effects	No data available.

Section 13: Disposal Considerations

Disposal Instructions

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation.

Section 15: Regulatory Information

TSCA 12(b)	Not applicable
SARA 313	Not applicable
SARA 311/312 Hazardous Categorization	
Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No
Clean Water Act	Not applicable
Clean Air Act	Not applicable
OSHA Occupational Safety/Health Administration	Not applicable
CERCLA	Not Applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
State Right-to-Know	Not applicable
U.S. Department of Transportation	
Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.
Other International Regulations	
Mexico - Grade Slight risk, Grade 1	
Canada	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
WHMIS Hazard Class D2B	Toxic materials

Section 16: Other Information

Disclaimer

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