

CST-C

SDS Number: 0169

Revision Date: 3/23/2021

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Alliance Group Inc. 262-251-4977
N114 W18621 Clinton Drive
Germantown, WI 53022

Phone: 800-255-3924**Emergency:** CHEMTEL

Product Identifier: CST-C
Common Name: Citric Acid
SDS Number: 0169
Revision Date: 3/23/2021
Product Use: Water Treatment Compound

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture**GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**

Health, Carcinogenicity, 1 B
Health, Skin corrosion/irritation, 1 C
Health, Serious Eye Damage/Eye Irritation, 1

GHS Label Elements, Including Precautionary Statements**GHS Signal Word:** **DANGER****GHS Hazard Pictograms:****GHS Hazard Statements:**

H350 - May cause cancer
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash skin thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call doctor/physician
P308+313 - IF exposed or concerned: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P402+404 - Store in a closed container. Store in secure manner.
P501 - Dispose of contents/container to an approved waste disposal plant

Hazards not Otherwise Classified (HNOC) or not Covered by GHS**Route of Entry:** Eyes; Inhalation; Ingestion; Skin.**Target Organs:** Respiratory system; Eyes; Skin;**Inhalation:** May be harmful if inhaled. May cause irritation and inflammation of the respiratory tract.



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- Skin Contact:** May cause irritation. Prolonged and repeated exposure may cause: drying, cracking, itching, redness, and burning sensation.
- Eye Contact:** May cause eye burns. May cause permanent eye damage. Symptoms may include: redness, burning sensation.
- Ingestion:** May be harmful if swallowed. May irritate or burn: mucous membranes. May cause: vomiting. pain. burning sensation.

HMIS III: Health = 2(Chronic), Fire = 0, Physical Hazard = 0
HMIS PPE: D - Face Shield and Eye Protection, Gloves, Apron

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

3 COMPOSITION/INFORMATION OF INGREDIENTS

Substance/Mixture: Mixture
 (contains corrosion inhibitor)

CAS#	Chemical %	Chemical Name:
77-92-9	50%	Citric Acid
7664-93-9	0.06-0.12%	Sulfuric acid

4 FIRST AID MEASURES

- Inhalation:** If symptoms develop, move victim to fresh air. Give oxygen or artificial respiration if needed. Consult a physician
- Skin Contact:** Promptly wash skin with soap and water. Remove contaminated clothing. If symptoms persist, get immediate medical attention. Do not reuse clothing and shoes until cleaned. Do not apply oils and ointments unless ordered by a physician.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get immediate medical attention.
- Ingestion:** Do NOT induce vomiting. If fully conscious, drink a quart of water and rinse mouth with water. Never induce vomiting or give anything by mouth to an unconscious victim. For spontaneous vomiting, keep head below hips. Consult a physician.

Protection of First Aid Personnel:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. If it is suspected that dust, vapor, or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

5 FIRE FIGHTING MEASURES

Flammability: No data available



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Flash Point: No data available
Flash Point Method: No data available
Burning Rate: No data available
Autoignition Temp: No data available.
LEL: No data available
UEL: No data available

Fire Fighting Methods

Evacuate area of unprotected personal. Wear protective clothing including NIOSH Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire exposed containers and disperse vapors.

Unusual Fire or Explosion Hazards:

No data available

Extinguishing Media

Suitable: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable fire extinguisher: No data available

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ACCIDENTAL RELEASE MEASURES

Personal Precautions

Evacuate area. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let products enter drains. Discharge into the environment must be avoided.

Spill

Contain the discharged solution; 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: Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Do not puncture or drop containers.

Storage Requirements: Store in cool/dry area. Keep away from incompatible materials. Keep container tightly closed. Do not store in unlabeled or mislabeled containers. Do not freeze.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide local exhaust ventilation. Maintain adequate ventilation. Avoid creating dust or mist.

Personal Protective Equipment:

Hygiene Measures

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

Respiratory

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.



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Eyes and Face

Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid or airborne material.

Skin

Prevent contact with this product. Wear gloves and protective clothing depending on conditions of use. Protective gloves: gauntlet-type, neoprene, nitrile.

Component	OSHA PEL	ACGIH TWA/ TLV
Citric Acid	No data available	No data available
Sulfuric Acid	1 mg/m3	0.2 mg/m3 (thoracic fraction)

9**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Clear; Amber.	Odor:	Mild odor.
Physical State:	Liquid	Molecular Formula:	No data available
Odor Threshold:	No data available.	Solubility:	Complete
Particle Size:	No data available	Softening Point:	No data available
Spec Grav./Density:	1.23 - 1.25	Percent Volatile:	No Data Available
Viscosity:	No data available.	Heat Value:	No data available
Saturated Vapor Concentration:	No data available	Freezing/Melting Pt.:	5° F
Boiling Point:	219 F	Flash Point:	No data available.
Flammability:	No data available.	Octanol:	No data available
Partition Coefficient:	No data available	Vapor Density:	No data available
Vapor Pressure:	No data available	VOC:	None
pH:	<2.0	Bulk Density:	No data available
Evap. Rate:	<1	Auto-Ignition Temp:	No data available.
Molecular weight:	No data available	UFL/LFL:	No data available
Decomp Temp:	No data available.		

Lower Explosion Limits: No data available.

Upper Explosion Limits: No data available.

10**STABILITY AND REACTIVITY**

Reactivity:	No data available
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Heat, moisture, and incompatible materials
Materials to Avoid:	Potassium tartrate, alkali and alaine earth, carbonates, bicarbonates, acetates, sulfides, metal nitrates, and strong oxidizers
Hazardous Decomposition:	May liberate carbon monoxide or carbon dioxide.
Hazardous Polymerization:	Will not occur under normal conditions.

11**TOXICOLOGICAL INFORMATION****Toxicity Data:**

Eye: Causes severe eye irritation and burns

» Citric Acid Eyes - rabbit - irritating to eyes



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» Sulfuric Acid Eyes - Rabbit - severe eye irritation

Dermal: Causes irritation and burns. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

» Citric Acid Skin - rabbit - mild skin irritation

» Sulfuric Acid Skin- rabbit - extremely corrosive and destructive to tissue
Skin - human - mild skin irritation

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Oral: May be harmful if swallowed.

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Citric Acid	Rat: 5400 mg/kg	Rat: >2000mg/kg	No data available
Sulfuric Acid	Rat: 2140 mg/kg	No data available	Rat: 510 mg/m3 -2H

Acute Toxicity Estimate (ATE):

Inhalation Vapor: No data available

Chronic Effects: No data available

Carcinogenicity: IARC: 1 - Group 2: Carcinogenic to humans (Sulfuric Acid)

NTP: Known to be human carcinogen (Sulfuric Acid)

Mutagenicity: No data available

Teratogenicity: No data available

Fertility Effects: No data available

12**ECOLOGICAL INFORMATION**

Biodegradability:

» Biological Oxygen Demand (BOD): 40%, 5 days and 60%, 10-20 days.

» Citric Acid biodegrades quite rapidly

Toxicity to fish

» LC50, mortality- *Leuciscus idus melanotus* - 440 mg/l - 48 h.

Toxicity to aquatic invertebrates

» Static test - *Daphnia magna* (Water flea) - 1,535 mg/l - 24 h.

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Other adverse effects: no data available

13**DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local, state, and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.

RCRA Code = D002

The RCRA waste code should be assigned in discussion between the user, the producer, and the waste disposal company.

14**TRANSPORT INFORMATION**

Not DOT regulated as a hazardous product.



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REGULATORY INFORMATION

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

FEDERAL REGULATIONS

TSCA Inventory Status: All components of this product are listed "Active" on the Toxic Substances Control Act (TSCA) 8 (b) Inventory.

CERCLA / SARA Emergency Reporting A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements.

» **Sulfuric Acid - CERCLA Reporting amount 1000 lbs (CAS# 7664-93-9)**

Clean Water Act (CWA): The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA. »
Sulfuric Acid

RCRA: The requirements of the federal hazardous waste regulations do not apply unless the waste fails to pass any of EPA's four tests for determining hazardous wastes. It is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at time of disposal

» **Waste Code D002 = Corrosivity**

STATE REGULATIONS

California- Proposition 65: Warning. This product contains a chemical known to the State of California to cause cancer. Sulfuric Acid (CAS# 7664-93-9)

Massachusetts - RTK Substances: The following components are listed: No component listed

New Jersey - RTK Substances: The following components are listed: Citric Acid (CAS# 77-92-9) and Sulfuric Acid (CAS# 7664-93-9)

Pennsylvania - RTK Substances: The following components are listed: Citric Acid (CAS# 77-92-9) and Sulfuric Acid (CAS# 7664-93-9)

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OTHER INFORMATION

Prepared By: P May

Reason For Revision: Updated GHS & Regulatory Information

Disclaimer:

This information is given in good faith and based on our current knowledge of the product. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

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