

SAFETY DATA SHEET



Date Prepared : 04/14/2016

MSDS No : CA95

CITRIC ACID 9.5% SOLUTION

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CITRIC ACID 9.5% SOLUTION**MANUFACTURER**

Tarr, LLC
P.O. Box 12570
Portland, OR 97212
Product Stewardship: 503-288-5294

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation) :(800) 424 - 9300
CANUTEC (Canadian Transportation) :(613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Health:**

Skin Corrosion, Category 2
Skin Irritation, Category 2
Serious Eye Damage, Category 2
Target Organ Toxicity (Single exposure), Category 3

GHS LABEL

Exclamation
mark

SIGNAL WORD: WARNING**HAZARD STATEMENTS**

H319: Causes serious eye irritation.
H315: Causes skin irritation.
H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)**Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P270: Do not eat, drink or smoke when using this product.
P233: Keep container tightly closed.
P102: Keep out of reach of children.
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

CITRIC ACID 9.5% SOLUTION**Response:**

P273: Avoid release to the environment.

Storage:

P402+P404: Store in a dry place. Store in a closed container.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! Causes Eye Irritation - Aspiration may cause lung damage.

POTENTIAL HEALTH EFFECTS

EYES: May cause pain, transient irritation and superficial corneal effects. Corneal injury is unlikely. Vapors or mists may cause eye irritation.

SKIN: Prolonged or repeated contact is not likely to cause significant skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Repeated skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potential lethal amounts.

INGESTION: Liquid is moderately toxic and may be harmful if swallowed. Excessive exposure may cause central nervous system (CNS) effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing amounts larger than that may cause serious injury, even death.

INHALATION: At room temperature, exposures to vapors are minimal due to physical properties; higher temperature may generate vapor levels sufficient to cause adverse effects.

MEDICAL CONDITIONS AGGRAVATED: Preexisting diseases in or history of ailments involving skin, central nervous system, liver and kidney.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
Water	89 - 91	7732-18-5
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	8 - 10	77-92-9

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention. Contact lenses should never be worn when working with this chemical.

SKIN: Remove contaminated clothing/shoes. Wipe off excess material from exposed area. Flush with large amounts of water for at least 15 minutes, by the clock, and follow by washing with soap, if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. Do not reuse clothing until cleaned.

INGESTION: Do not give liquids if victim is unconscious or drowsy. Otherwise, give 2 glasses of water (16 oz.) and immediately call physician. Induce vomiting as directed by medical personnel. Keep victim's head below hips while vomiting. Small amounts entering mouth should be rinsed out for 5 minutes.

INHALATION: Remove from exposure to fresh air. If not breathing or if breathing is difficult, oxygen should be administered by qualified personnel. Get medical aid if symptoms persist.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

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ACUTE EFFECTS: Redness of the skin or eyes. Repeated excessive exposures may cause severe kidney and also liver and gastrointestinal effects. Signs and symptoms of excessive exposure may be central nervous system effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. Observations in animals include formation of bladder stones after repeated oral doses of ethylene glycol. Reports of kidney failure and death in burn patients suggest the ethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, "alcohol" foam, dry chemical, or CO₂. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Do not use direct water stream. May spread fire.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXPLOSION HAZARDS: No fire and explosion hazards expected under normal storage and handling conditions (i.e. ambient temperatures). However, ethylene glycol or solutions of ethylene glycol and water can form flammable vapors with air if heated sufficiently. Keep people away. Isolate fire area and deny unnecessary entry.

FIRE FIGHTING PROCEDURES: Clear fire area of all non-emergency personnel. Do not enter fire space without proper protective gear, including eye protection and respiratory protection to prevent breathing products of combustion. Move containers from fire area if it can be done without risk. Use water stream to cool exposed containers.

FIRE FIGHTING EQUIPMENT: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Remove all sources of ignition and provide ventilation. Wear protective equipment as given in section 8. Absorb small spills with inert material (clay, sand). Prevent contamination of surface waters.

LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing personal protective equipment should be excluded from area of spill until clean-up has been completed. Shut off source of leak if safe to do so. Dike and contain spill. Prevent from entering drains, sewers, streams or other bodies of water. If runoff occurs, notify authorities as required. Remove with vacuum trucks or pump into clean storage/salvage vessels for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for proper disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children. Product may become a solid at temperatures below minus 8 degrees F. Do not store near food, foodstuffs, drugs or potable water supplies.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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ENGINEERING CONTROLS: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: Use in a well ventilated area. Wear a NIOSH approved respirator appropriate for airborne exposure at the point of use.

WORK HYGIENIC PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

COMMENTS: May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Colorless liquid.

pH: 2.2

FLASHPOINT AND METHOD: 345°C

VAPOR DENSITY: Not Available

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Nil

DENSITY: 8.78

SPECIFIC GRAVITY: 1 to 1.1

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides and unidentified organic compounds may be formed during combustion.

INCOMPATIBLE MATERIALS: Isolate from strong oxidizers such as permanganates, chromates and peroxides.

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

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GENERAL COMMENTS: Discharge of this product must be in accordance with all federal, state, local or other applicable laws and regulations.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal must be made in accordance with applicable governmental regulations. Do not contaminate any streams, lakes, or ponds.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: NOT DOT REGULATED

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This product should be reported as an immediate (acute) health hazard, and a delayed (chronic) health hazard.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: Listed.

GENERAL COMMENTS: The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

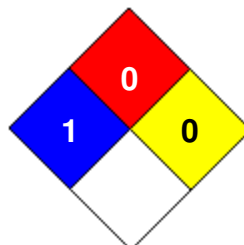
16. OTHER INFORMATION

APPROVED BY: Compliance

PREPARED BY: Compliance **Date Prepared:** 04/14/2016

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

NFPA CODES

HMIS RATINGS NOTES: The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in the SDS must be considered. Personal protection rating to be supplied by user depending on use conditions.

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is

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