



PO BOX 16458 • FRESNO CA 93755

MATERIAL SAFETY DATA SHEET

PRODUCT/TRADE NAME:

TRI-FOL

I. NAME

PRODUCT/TRADE NAME: TRI-FOL
EPA REGISTRATION #: NONE
CHEMICAL NAME/Common Name:
2-Hydroxyl-1,2,3-B-Hydroxy-tricarboxylic acid/Citric Acid
Calcium Chloride/Calcium Chloride

II. HAZARDOUS INGREDIENTS

	CAS#	OSHA PEL	ACGIH TLV
Citric Acid	77-92-9	NE	NE
Calcium Chloride	10043-52-4	NE	NE

III. PHYSICAL DATA

SPECIFIC GRAVITY (H₂O = 1): 1.21
MELTING POINT: NA
VAPOR DENSITY (AIR = 1): NA
% VOLATILES BY VOL.: NA
ODOR: Mild
APPEARANCE: Amber Liquid
FLASH POINT/METHOD: NA
VAPOR PRESSURE (mmHg): NA
SOLUBILITY IN H₂O: Dispersible

IV. FIRE & EXPLOSION HAZARD

EXTINGUISHING MEDIA: Water Fog Foam Alcohol Foam
 CO₂ Dry Chemical Other

FIRE FIGHTING PRECAUTIONS & HAZARDS:

Fight fire upwind. Wear positive pressure self-contained breathing apparatus and full protective equipment. Avoid breathing smoke and spray mist. Avoid fallout and runoff. Dike to prevent entering drains, sewers, or water courses. Evacuate people downwind from fire.

V. CARCINOGEN STATUS

OSHA NTP IARC No Listing Type

VI. REACTIVITY

Stable HAZARDOUS POLYMERIZATION
 Unstable May Occur Will Not Occur

AVOID: Strong Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: CO_x, SO_x, PO_x, H

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL: Wear appropriate respiratory and personal protective equipment. Absorb with inert material and vacuum or sweep into an approved disposal container.

DECONTAMINATION: Treat area with detergent and water. Absorb with inert material and place in approved disposal containers. Repeat as necessary until area is clean.

ENVIRONMENTAL HAZARDS: Dike to prevent entering drains, sewers or water courses.

DISPOSAL: Place in DOT-approved disposal containers and dispose of in an approved disposal site.

VIII. HEALTH PRECAUTION DATA

INGESTION: Do not ingest. Wash thoroughly before eating, drinking or smoking. Do not store near food or feed.

INHALATION: No established PEL/TLV. Wear appropriate respiratory protection for the exposures encountered.

SKIN ABSORPTION: May cause mild skin irritation or dermatitis after prolonged contact. Wear proper personal protective equipment to reduce exposure.

EYE EXPOSURE: Keep out of eyes. May be mildly irritating to the eyes. Wear proper eye protection to reduce splash exposure. If exposed, flush eyes for a minimum of 15 minutes with water.

EFFECTS OF OVEREXPOSURE: Ingestion may cause nausea, throat irritation, central nervous system depression and narcosis. May cause skin irritation and dermatitis. No known chronic effects. Preexisting medical conditions involving the above symptoms may be aggravated by exposure.

FIRST AID: In all cases, get prompt medical attention. If ingested, give several glasses of water. Do not induce vomiting. For skin exposure, remove contami-

nated clothing and wash with soap and water. For eye exposure, flush eyes with water for a minimum of 15 minutes. If inhaled, remove victim to fresh air, and administer CPR if necessary.

IX. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH/MSHA - approved respirator for organic vapors for the exposures encountered. Positive pressure self-contained breathing apparatus should be used for confined space entry and high exposure operations.

PERSONAL PROTECTIVE EQUIPMENT: Recommend chemical goggles and rubber or neoprene gloves.

VENTILATION: Recommend local exhaust ventilation for manufacture and formulation operations. General ventilation sufficient for intended use.

X. SPECIAL PRECAUTIONS

Keep out of the reach of children. Read and follow all label instructions. Store in tightly closed containers. Keep away from open flame, heat or ignition sources.

XI. REGULATORY DATA

SARA HAZARD CLASS: Acute Chronic Flammable
 Pressure Reactive None

SARA 313: Yes No Chemical:

SARA 302: Yes No Chemical:

TPQ:

CERCLA: Yes No Chemical:

RQ:

RCRA: Yes No

NFPA HAZARD RATING:

Health: [1]

Fire: [1]

Reactivity: [0]

Special: []

HMS CODES:

Health: [1]

Fire: [1]

Reactivity: [0]

NFPA HAZARD RATING SCALE:

0 = Minimal 3 = Serious

1 = Slight 4 = Severe

2 = Moderate

HMS HAZARD RATING SCALE:

0 = Minimal 3 = Serious

1 = Slight 4 = Severe

2 = Moderate

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*Technical Material NE - Not Established NA - Not Applicable

24 Hour Emergency Phone Number
CHEMTREC: (800) 424-9300

