

## MATERIAL SAFETY DATA SHEET

FIVE STAR AFFILIATES, INC.  
6731 E. 50TH AVENUE  
COMMERCE CITY CO 80022

PHONE: 303-287-0186  
MSDS DATE: 12-10-10  
REPLACES: 12-19-97

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### IDENTIFICATION

PRODUCT NAME: CITRIC ACID (FOOD GRADE)  
COMPOSITION: ALIPHATIC ACID

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### PHYSICAL DATA

APPEARANCE: White Powder	ODOR: Odorless
SOLUBILITY IN WATER: > 50%	pH 1% SOLUTION: 2.2
VAPOR DENSITY (AIR = 1): N/A Solid	EVAPORATION RATE: 1 (water=1) N/A
VAPOR PRESSURE: N/A Solid	% VOLATILE: N/A
BOILING POINT: N/A Solid	BULK DENSITY:

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### FIRE AND EXPLOSION DATA

FLAMMABILITY: Ignition Temp. (Powder) 1000-1020° C  
EXTINGUISHING MEDIA: Water

UNUSUAL FIRE AND  
EXPLOSION HAZARDS: None. Explosion Rating - Weak

\* Aqueous solutions of Citric Acid can, if in contact with reactive metal (iron, zinc, or aluminum), form hydrogen which may form explosive mixtures.

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### HEALTH HAZARD DATA

ORAL INGESTION:	Generally recognized as safe for use in foods.
EYE CONTACT:	Considered an irritant of mild organic acids.
INHALATION:	Dust may cause mild symptoms of respiratory irritation.
SKIN CONTACT:	Mild irritant.
ORAL:	orl-rat LD 50: 11.700 mg/kg
DERMAL:	skn-rbt 500 mg/ 24 hr moderate
EYE:	eye 750 mg/ 24 hr severe

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### EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: Flush with cool running water for at least 15 minutes. Get medical attention as soon as possible.  
SKIN CONTACT: Flush with cool running water. If irritation develops get medical attention. Wash clothing before reuse.  
INGESTION: Not applicable - material generally recognized as safe.  
INHALATION: Move victim to fresh air.

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**SPECIAL PROTECTION INFORMATION**

- Wear approved nuisance dust mask.
- Wear standard protective work gloves.
- Wear safety glasses.

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**REACTIVITY DATA**

**INCOMPATIBLE MATERIALS:** Metallic nitrates and strong oxidizers.  
**STABILITY:** Product is stable.  
**POLYMERIZATION:** Will not occur.  
**DECOMPOSITION PRODUCTS:** None Known

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**SPILL OR LEAK PROCEDURES**

**SPILL:** Recover by vacuum or broom and shovel. Flush area with water to remove final traces.

**DISPOSAL:** Material collected in drums is an EPA hazardous waste (D002) corrosive. Dispose of it in an EPA approved facility. Comply with all federal, state, and local regulations.

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**EMERGENCY TELEPHONE: INFOTRAC 800-535-5053**