

HAZARD RATINGS

Health: 1
 Flammability: 1
 Reactivity: 0

MATERIAL SAFETY DATA SHEET**SECTION I. PRODUCT IDENTIFICATION**

Product Name Citric Acid All Grades – Solid
 MSDS# P21822VS
 Date Issued: 2/2/99
 Supersedes: 7/23/96
 Issued by: 008074
 Reviewed Date: 8/6/2004

This MSDS has been reviewed on 8/6/2004 and is Current as of the DATE ISSUED above.

Product Name.....: Citric Acid, Anhydrous, FCC, USP
 Chemical Family.....: Organic Acid
 Chemical Name.....: 2-Hydroxy-1,2,3 Propanetricarboxylic Acid
 CAS Number.....: 77-92-9 Anhydrous
 5949-29-1 Monohydrate

SECTION II. HEALTH HAZARD INFORMATION

.....Primary Routes of Entry: Skin Eyes Inhalation Ingestion

❖ *Effects of overexposure:*

- Eye contact: Can cause irritation.
- Skin Contact: Can cause irritation. Dermatitis may result from repeated exposure.
- Inhalation: Dust may cause respiratory tract irritation.
- Ingestion: May cause irritation to the entire gastrointestinal tract.

SECTION III. INGREDIENTS

2-Hydroxy-1,2,3 Propanetricarboxylic Acid			Concentration (%)
CAS Number	Exposure Limits		
77-92-9	OSHA: 5.000 mg/m3 (respirable dust)		100.000 %
Citric Acid Monohydrate	Not Available		100.00 %
5949-29-1			

SECTION IV. PHYSICAL PROPERTIES

Physical Form.....: Crystals
 Appearance.....: Free Flowing crystalline
 Color.....: White
 Odor.....: Odorless with a strong acid taste
 pH.....: Not Established
 Boiling Point.....: Not Applicable
 Melting/Freezing Point.....: Not Applicable
 Solubility in Water.....: 59.2 g/100 g at 68 F (20 C)
 Specific Gravity.....: Not Established
 Bulk Density.....: Not Applicable
 % Volatile by Volume.....: Not Applicable
 Vapor Pressure.....: Not Applicable

SECTION V. FIRE AND EXPLOSION DATA

Flash Point: NA

Auto-Ignition Temperature: NA

Extinguishing Media: Water; Dry Chemical; Caron Dioxide

- ❖ *Special Fire Fighting Procedures* Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- ❖ *Unusual Fire Fighting Hazard:* In case of fire CO, CO₂ and other potentially toxic fumes.

SECTION VI.**EMERGENCY AND FIRST AID PROCEDURES**

- ❖ *Eyes:* Flush well with water for at least 15 minutes. Get Medical help if irritation persists.
- ❖ *Skin:* Wash with soap and water
- ❖ *Inhalation:* Move to fresh air.
- ❖ *Ingestion:* Drinks lots of water to dilute **DO NOT INDUCE VOMITING.** Get medical help.

SECTION VII.**EXPOSURE CONTROL/PERSONAL PROTECTION**

Personal protective equipment: Gloves and eye protection

Gloves (specify): Chemical resistant

Eye (specify): Safety goggles

Clothing (specify): Normal materials handling clothing

Respirator (specify): NA

Footwear (specify): NA

Other: None

SECTION VIII.**REACTIVITY DATA**

Chemical Stability: Stable

Hazardous Polymerization: Will not occur.

Incompatibility with other substances: Reaction with caustic can create heat (strong exotherm). Solutions are mildly corrosive to carbon steel.

Instability Conditions: None Known.

Hazardous decomposition products: In case of fire CO, CO₂ and other potentially toxic fumes.

SECTION IX.**SPILL AND LEAK PROCEDURES**

Spill and leak procedures: Clean by vacuum or broom sweeping and remove to disposal container.

Waste disposal method: Cover with soda ash or sodium bicarbonate to neutralize. Mix and add water if necessary. Scoop up slurry and dispose in accordance with existing federal, state and local environmental control regulations.

SECTION X**SPECIAL PRECAUTIONS AND STORAGE DATA**

Storage Temperature (Min/Max): Max. 405 F (207 C) (product deteriorates)

Shelf Life: Not Established

Special Sensitivity: None Known

Handling/Storage Precautions: Avoid breathing dust. Avoid contact with eyes and skin. Wash thoroughly after handling. Store in a dry place away from excessive heat, in original or similar waterproof containers. Avoid air conveying of powdered product due to potential of static buildup. Reseal containers immediately after use.

SECTION XI.**TRANSPORT INFORMATION**

Not regulated

FEDERAL REGULATORY INFORMATION

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: On TSCA Inventory

CERCLA Reportable Quantity: None

SARA Reportable Quantity: Exempt from SARA Title III reporting; contains no section 313 toxic chemical. It may contain up to the FCC limits for arsenic (1 ppm), lead (0.5 ppm), and heavy metals (5 ppm, as lead).

RCRA Status: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

FDA Status: Citric Acid meets the specifications given in the Third Edition of the Food Chemicals Codex and is in chemical compliance with 21 CFR 182.1033 as a Multiple Purpose Generally Recognized As Safe Food Substance. Citric Acid meets the specifications Given in the USP XXII including USP XXII Supplement 7.