AERCHEM INC. 320 N. WALNUT STREET BLOOMINGTON, IN 47404

Tel: 812-334-9996 Fax: 812-334-1960 Emergency: 800-424-9300 Effective Date: 10/25/95 Product Name: Citric Acid, Anhydrous USP Citric Acid, Monohydrate USP **Chemical Formula:** $C_6H_8O_7$ **Synonyms:** 2-Hydroxy-1,2,3-tricarboxylic acid, B-hydroxytricarballyic acid CAS No.: Citric Acid, Anhydrous USP 77-92-9 **Hazardous Ingredients:** None **Hazardous Symbols:** XI**EINECS No.:** None **Physical Data:** Melting point (range) Approx.: N/A Boiling point: 153 □ C (Anhydrous) 100 □ C (Monohydrate) Decomposition temperature: pH (depends on quality): N/A Solubility in water: 64.3% w/w at 30 □ C Odor: Physical form: Colorless, translucent crystals or powder Vapor pressure: N/A Tap density: N/A **Fire and Explosion Information:** N/A Flash point: (Auto) Ignition temperature: N/A Extinguishing media to be recommended: N/A to be avoided: N/A Special fire and explosions precautions: Standard fire fighting equipment for handling chemical related fires. Fire and explosions hazards: N/A Stable X **Reactivity Data:** Unstable ____ **Hazardous Decomposition: None** Hazardous Polymerization: Will not occur Incompatibilities: Potassium tartrate, alkali and alkaline earth carbonates and bicarbonates, acetates, sulfides. Metal nitrates. **Handling and Storage Information:** Normal handling and storing precautions for USP products. Keep in a cool dry area away from moisture.

Leak/Spill Information:

Citric Acid, AerChem, Inc.

Disposal Information:

(Consult Federal, Local and State regulations) Bury incinerate, cover contaminated surfaces with soda ash or sodium bicarbonate.

Health Hazard Information:

A. Exposure/Health Effects

Severe eye irritant. Nuisance dust symptoms.

Chronic Exposures:

Moderate irritant organic acid, some allergic properties.

Aggravation of pre-existing conditions:

Upper respiratory disorders.

B. First Aid:

Inhalation: Leave area of dust and seek fresh air.

Ingestion: Induce vomiting. Seek medical attention.

Skin Contact: Flush with large amounts of water for 15 minutes.

Eye Contact: Flush with large amounts of water for 15 minutes. Seek medical attention.

C. Toxicity Data

ORL-MUS: LD 50: 5040 mg/kg

Occupational Control Measures:

Airborne Exposure Limited: N/A

Ventilation Systems: Local exhaust recommended. Mechanical required.

Personal Respirators: (Niosh Approved) U.S. Bureau of mines approved dust mask.

Skin Protection: Protective clothing or equipment as needed.

Eye Protection: Chemical goggles, eye bath.