

MILES® CITRIC ACID
(2-HYDROXYPROPANE-1,2,3-TRICARBOXYLIC ACID)

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: Citric acid

CAS No.: 77-92-9 | Formula: $C_6H_8O_7$

Recommended Use: Acidulant, pH adjuster, chelating agent, descaler in cleaning products

Supplier: Miles Lubricants LLC

Emergency Telephone: CHEMTREC 1-800-424-9300 (US)

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification: Eye Irrit. 2A

Signal Word: Warning

Hazard Statements: H319 – Causes serious eye irritation.

Precautionary Statements: P264, P280, P305+P351+P338, P337+P313

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Citric acid (CAS 77-92-9): 99.5–100.5% (anhydrous)

SECTION 4: FIRST-AID MEASURES

Eye Contact: Flush with water 15+ minutes; seek medical attention if irritation persists.

Skin Contact: Wash with soap and water.

Inhalation: Move to fresh air if dust is inhaled; seek medical attention if symptoms persist.

Ingestion: Rinse mouth with water; drink water. Seek medical attention if symptoms occur.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, foam, dry chemical, CO_2 .

Special Hazards: Not flammable; fine dust can form explosive mixtures with air; combustion produces carbon oxides.

Firefighter PPE: SCBA for large fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Avoid creating dust. Sweep or vacuum up and place in a closed container; flush residue with water.

SECTION 7: HANDLING AND STORAGE

Store in tightly closed containers in a cool, dry, well-ventilated area to prevent moisture absorption and clumping. Keep away from strong bases and oxidizers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: No OSHA PEL or ACGIH TLV established for citric acid. Treat as nuisance dust.

Engineering Controls: General ventilation; local exhaust where dust is generated.

PPE: Chemical splash goggles; chemical-resistant gloves; dust mask if dust is generated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White, crystalline powder | **Odor:** Odorless

Melting Point: 153°C (307°F) | **Decomposition:** Above approx. 175°C

Density: 1.66 g/cm³ | **Flash Point:** Not applicable

pH: approx. 1.7 (100 g/L solution)

Solubility in Water: Very high (approx. 73 g/100 mL @ 20°C)

SECTION 10: STABILITY AND REACTIVITY

Stable under normal conditions. Avoid moisture, strong bases, strong oxidizers and strong reducing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

Low acute toxicity. Serious eye irritant; dust may irritate skin and the respiratory tract. Long-term overexposure may damage tooth enamel. Not classified as a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Readily biodegradable. Low aquatic toxicity; large releases may lower the pH of water.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose per local/state/federal regulations.

SECTION 14: TRANSPORT INFORMATION

DOT: Not regulated as a hazardous material.

SECTION 15: REGULATORY INFORMATION

Listed on TSCA. Confirm current federal, state and local regulatory status.

SECTION 16: OTHER INFORMATION

This SDS is a general reference compilation and does not replace the manufacturer's or Miles Lubricants LLC's officially issued, lot-specific SDS.