

**FLINN SCIENTIFIC, INC.**  
**Material Safety Data Sheet (MSDS)**

MSDS #: 244.00

Revision Date: June 22, 2010

**SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Citric Acid**

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

**SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS**

Citric acid monohydrate and/or citric acid anhydrous

Synonym: 2-hydroxy-1,2,3-propanetricarboxylic acid

CAS#: 77-92-9 (anhydrous) or 5949-29-1 (monohydrate)

**SECTION 3 — HAZARDS IDENTIFICATION**

White granules. Odorless.  
A severe eye and moderate skin irritant.

**FLINN AT-A-GLANCE**

Health-0  
Flammability-1  
Reactivity-0  
Exposure-1  
Storage-1

0 is low hazard, 3 is high hazard

**SECTION 4 — FIRST AID MEASURES**

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye: Immediately flush with fresh water for at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Give large quantities of water. Call a physician or poison control at once.

**SECTION 5 — FIRE FIGHTING MEASURES**

Combustible solid.

When heated to decomposition, emits acrid smoke and fumes.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

**NFPA CODE**

None  
established

**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

**SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides, and peracids.

Store in a cool, dry place. Store in a Flinn Chem-Saf Bag.

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

White granules. Odorless.

Specific Gravity: 1.54 (anhydrous)

Solubility: Water soluble.

Formula:  $C_6H_8O_7$ 

Formula Weight: 192.14

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with oxidizers, bases, and reducing agents.

Shelf life: Substance efflorescent.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Severe eye irritant.

ORL-RAT  $LD_{50}$ : N.A.

Chronic effects: N.A.

IHL-RAT  $LC_{50}$ : N.A.

Target organs: N.A.

SKN-RBT  $LD_{50}$ : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please consult with state and local regulations.

Flinn Suggested Disposal Method #26a is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping Name: Not regulated

Hazard Class: N/A

UN Number: N/A

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (201-069-1).

**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**