

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 360.00

Revision Date: July 12, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Fumaric 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

Fumaric acid

Synonym: Butenedioic acid

CAS#: 110-17-8

SECTION 3 — HAZARDS IDENTIFICATION

White crystals. Odorless.

A skin and eye irritant. Avoid all body contact.

FLINN AT-A-GLANCE

Health-0

Flammability-1

Reactivity-0

Exposure-1

Storage-0

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 irritating 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.

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.

FLINN SCIENTIFIC, INC.**Material Safety Data Sheet Fumaric Acid****MSDS #:** 360.00**Revision Date:** July 12, 2010**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

White crystals. Odorless.

Solubility: Soluble in alcohol and water.

Formula: $C_4H_4O_4$

Formula Weight: 116.08

Specific Gravity: 1.635

Melting Point: 287 °C (sealed tube)

Boiling Point: 290 °F

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with bases, oxidizers, reducers, and amines.

Shelf life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye irritant.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: 9300 mg/kgIHL-RAT LC₅₀: N.A.SKN-RBT LD₅₀: 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 #24a 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 (203-743-0).

SECTION 16 — OTHER INFORMATION

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