

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 485.00

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Maleic 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

Maleic Acid

Synonyms: maleinic acid, butenedioic acid

CAS#: 110-16-7

Section 3 — Hazards Identification

White crystal. Faint tea odor.

Moderately toxic by ingestion, inhalation, and skin absorption. Inhalation of dust may cause respiratory irritation. Corrosive to body tissues.

Combustible solid.

FLINN AT-A-GLANCE

Health-2
Flammability-1
Reactivity-1
Exposure-2
Storage-0

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, 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 15 minutes.

External: Wash continuously with fresh water for 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 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 area. Remove all ignition sources and water. Sweep up, place in 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. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

Section 9 — Physical and Chemical Properties

White crystal. Faint tea odor.
Solubility: Soluble in water, alcohol and acetone.
Slightly soluble in benzene.
Formula: HOOCCH:CHCOOH (cis Isomer)
Formula Weight: 116.07

Specific Gravity: 1.59 (solid)
Melting Point: 130-131 C

Section 10 — Stability and Reactivity

Avoid contact with bases, oxidizers, reducers.
Shelf Life: Indefinite.

Section 11 — Toxicological Information

Acute effects: Corrosive, gastrointestinal disturbances
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 708 mg/kg
IHL-RAT LC50: N.A.
SKN-RBT LD50: 1560 mg/kg

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: Maleic acid
Hazard Class: 8, Corrosive
UN Number: NA2215

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (203-742-5).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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