

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 485.20

Revision Date: September 22, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Maleic Anhydride

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).

Hazard class: Sensitization, skin (Category 1). May cause an allergic skin reaction (H317).

Hazard class: Sensitization, respiratory (Category 1). May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Maleic anhydride	108-31-6	(COCH) ₂ O	98.057	
Synonym: 2,5-Furandione; cis-Butenedioic anhydride				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing (P305+P351+P338).

If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation or rash occurs:** Get medical advice or attention (P333+P313). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Do not induce vomiting. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Class IIIB combustible solid.

Flash point: 102 °C Flammable limits: Upper 7.1% Lower: 1.4% Autoignition Temperature: 477 °C

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher. Do not use alkalies or water.

NFPA CODE

H-3

F-1

R-1

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Exothermic reaction with water and alkalies. Gather dust with a dry paper towel to avoid generating dust. Place in a sealed bag or container and dispose. 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

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Contaminated work clothing should not be allowed out of the workplace (P272). In case of inadequate ventilation, wear respiratory protection (P285).
Exposure guidelines: TLV 0.0025 ppm (ACGIH); PEL 0.25 ppm (OSHA); IDLH 2.5 ppm

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless to white crystalline needles, lumps, or pellets. Sharp, irritating, acrid odor.
Soluble in water (exothermic), alcohol, and acetone.

Boiling point: 202 °C
Melting point: 51-56 °C
Specific gravity: 1.48
Vapor density: 3.38

SECTION 10 — STABILITY AND REACTIVITY

Avoid heat and sunlight; undergoes general exothermic autoxidation and decomposition. Reacts with water, alkalies, and alkali metals.
Shelf life: Fair, store in a cool, dry place.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, mucous membrane, and GI tract irritant.
Chronic effects: Dermatitis, pulmonary edema, asthma, mucous membrane ulceration.
Target organs: Eyes, skin, mucous membranes.

ORL-RAT LD₅₀: 400 mg/kg
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: 2620 mg/kg

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

SECTION 12 — ECOLOGICAL INFORMATION

EC₅₀ *Daphnia* 88mg/L/24H

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Maleic anhydride. Hazard class: 8. UN number: UN2215.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA listed.

SECTION 16 — OTHER INFORMATION

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

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