**SDS #:** 485.00 **Revision Date:** March 21, 2014

DANGER

Pictograms

# 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

Signal Word

# 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 and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

Hazard class: Sensitization, skin (Category 1). May cause an allergic skin reaction (H317). Avoid breathing dust or fumes (P261).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

# SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Maleic acid	110-16-7	HO <sub>2</sub> CCH:CHCO <sub>2</sub> H	116.07	
Synonyms: Maleinic acid, Butenedioic acid				

# SECTION 4 — FIRST AID MEASURES

Get medical advice or attention (P313). **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 so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313). **If on skin:** Wash with plenty of water (P302+P352). **If skin irritation or rash occurs:** Get medical advice or attention (P333+P313). **If swallowed:** Rinse mouth (P330). Call a POISON CENTER or physician if you feel unwell (P301+P312).

# SECTION 5 — FIRE FIGHTING MEASURES

Combustible solid. Flash point 127 °C Flammable limits: Lower: 2.7 % When heated to decomposition, may emit toxic fumes. **In case of fire:** Use a tri-class dry chemical fire extinguisher.

# SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and water. 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.

NFPA Code None established **Maleic Acid** 

#### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Contaminated work clothing should not be allowed out of the workplace (P272). Use only in a hood or well-ventilated area (P271).

### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystal. Faint tea odor. Soluble: Water, alcohol, and acetone Melting point: 139 °C Specific gravity: 1.59 (solid)

# SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with bases, oxidizers, and reducers. Shelf life: Indefinite, if stored properly.

#### SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Skin and eye corrosion and irritation, gastrointestinal disturbances. Chronic effects: N.A. Target organs: Eyes, skin. ORL-RAT LD<sub>50</sub>: 708 mg/kg IHL-RAT LC<sub>50</sub>: N.A. SKN-RBT LD<sub>50</sub>: 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 review all federal, state and local regulations that may apply before proceeding. 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

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals. **Revision Date:** March 21, 2014