

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 219.10

Revision Date: May 22, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Carnoy's Plant Fixative

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

Acetic acid (64-19-7) 25% and Ethyl alcohol (64-17-5) 75%.

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Clear, colorless liquid with a strong vinegar-like odor.

Toxic by inhalation, ingestion, and skin absorption. Corrosive; causes severe burns to eyes and skin.

Fumes can be suffocating.

Flammable liquid. Avoid any source of ignition.

FLINN AT-A-GLANCE

Health-2

Flammability-3

Reactivity-1

Exposure-2

Storage-3

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

Internal: Do NOT induce vomiting. Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid due to ethyl alcohol content.

Flash point: 22 °C When heated, releases flammable 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. Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines, and amides.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

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 ventilation to keep airborne concentrations low.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid with a strong vinegar-like odor.

pH: 1.5

Hazardous components: acetic acid, 25%, and ethyl alcohol, 75%.

Used to fix plant tissues.

SECTION 10 — STABILITY AND REACTIVITY

Avoid sparks, flame, or other sources of ignition. Solution contains all flammable constituents.

Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive, toxic.

ORL-RAT LD₅₀: 3310 mg/kg as acetic acid

Chronic effects: N.A.

IHL-MUS LC₅₀: 5620 ppm/1hour as acetic acid

Target organs: Respiratory tract, eyes, skin, mucous membranes

SKN-RBT LD₅₀: 1060 mg/kg as acetic acid

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

SECTION 12 — ECOLOGICAL INFORMATION

May be toxic to aquatic life.

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: Ethyl alcohol

Hazard class: 3, Flammable liquid

UN number: UN1170

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not 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.**