

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Acetic Acid 6.1 M - 17.4 M (Glacial)

Signal Word  
**DANGER**

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

Chemtrec Emergency Phone Number: (800) 424-9338

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).



Hazard class: Acute toxicity, dermal (Category 4). Harmful in contact with skin (H312).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).



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

Hazard class: Acute toxicity, inhalation (Category 3). Toxic if inhaled (H331).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Acetic acid	64-19-7	CH <sub>3</sub> COOH	60.05	>90%
Synonyms: Vinegar acid; Ethanoic acid				

### 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 so. Continue rinsing (P305+P351+P338). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If skin irritation or rash occurs:** Get medical advice or attention (P333+P313). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### SECTION 5 — FIRE FIGHTING MEASURES

Class II combustible liquid.

NFPA Code

Flash point: 40 °C (CC) Flammable limits: Lower: 4.0% Upper: 19.9% Autoignition

H-3

Temperature: 464 °C

F-2

When heated to decomposition, may emit toxic fumes.

R-0

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

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## SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids. Store away from nitric acid.

Store in a dedicated acid cabinet and away from any source of water. If an acid cabinet is not available, store in a Flinn Saf-Cube™.

Always add acid to water.

Keep container tightly closed (P233). Keep cool (P235). Use only in a hood or well-ventilated area (P271).

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Wear nitrile, neoprene or butyl rubber 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).

Exposure guidelines: PEL 10 ppm (OSHA) TLV 10 ppm Ceiling 15 ppm (ACGIH)

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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Clear, colorless liquid. Strong vinegar-like odor.

Boiling point: 118 °C

Soluble: Miscible with water, alcohol, glycerol, and ether.

Freezes at slightly below room temperature (17 °C).

Melting point: 16.6 °C

Vapor pressure: 15.7 mm Hg at 25 °C

pH <2>

Vapor density: 2.07

Specific gravity: 1.05

Viscosity: 1.056 mPa.s at 25 °C

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## SECTION 10 — STABILITY AND REACTIVITY

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Avoid contact with strong oxidizers, especially chromic and nitric acids. Incompatible with metals (except aluminum), alcohols, amines, permanganates, peroxides, hydroxides, oxides, phosphates, and carbonates.

Shelf life: Good, if stored properly. Store in a dedicated acid cabinet.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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Acute effects: Corrosive to body tissues and mucous membranes.

ORL-RAT LD<sub>50</sub>: 3310 mg/kg

IHL-MUS LC<sub>50</sub>: 5620 ppm/1H

Chronic effects: Respiratory tract inflammation; darkens skin.

SKN-RBT LD<sub>50</sub>: 1.06 mg/kg

Target organs: Eyes, skin, teeth, respiratory tract.

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## SECTION 12 — ECOLOGICAL INFORMATION

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May be toxic to aquatic life. Microtox test: If released in water or soil, acetic acid will biodegrade readily.

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #24a is one option.

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## SECTION 14 — TRANSPORT INFORMATION

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Shipping name: Acetic Acid, Glacial. Hazard class: 8, Corrosive, Flammable Liquid. UN number: UN2789

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## SECTION 15 — REGULATORY INFORMATION

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TSCA-listed, EINECS-listed (200-580-7). RCRA code D001, D002.

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**SECTION 16 — OTHER INFORMATION**

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

N/A = Not applicable

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

**Revision Date:** December 30, 2015

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