FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 5.00
Revision Date: September 24, 2002

Section 1 — Chemical Product and Company Identification

Acetic Acid; Glacial

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; Glacial
Synonyms: vinegar acid, ethanoic acid
CAS#: 64-19-7

Section 3 — Hazards Identification

Clear colorless liquid, strong vinegar odor.
Corrosive, causes severe burns to eyes and skin. Moderately toxic by ingestion, inhalation and skin absorption. Fumes can be suffocating.
Class II Combustible Liquid.

FLINN AT-A-GLANCE
Health-2
Flammability-2
Reactivity-2
Exposure-3
Storage-3

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 and mild liquid soap for 15 minutes.
Internal: Give 1 to 2 cups of water or milk, followed by a gastric antacid, such as milk of magnesia. Do not induce vomiting. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Class II Combustible liquid. When heating to decomposition, emits irritating fumes.
Flash Point: 103 F (OC) Upper: 19.9% Lower: 4.0% Ait: 867 F
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
H-3
F-2
R-0

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and absorbent material, neutralize with sodium bicarbonate or calcium hydroxide and deposit in sealed bag or container. 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 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. 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. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).
Exposure guidelines: TWA 10 ppm, STEL 15 ppm (OSHA, NI0SH)

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Section 9 — Physical and Chemical Properties

Clear colorless liquid with strong 'vinegar' odor
Solubility: Soluble in water.
Freezes at slightly below room temperature (17 C).
Formula: CH3CO2H
Formula Weight: 60.5
Specific Gravity: 1.05

Melting Point: 16.2 C
Boiling Point: 244 F
Vapor Density: 3.52
Vapor Pressure: 11 mm and 20 C
Concentration: 17.4 molar; 36-37%

Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers, especially chromic and nitric acids.
Shelf Life: Indefinite, if stored properly.

Section 11 — Toxicological Information

Acute effects: Harmful liquid, corrosive
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 3310 mg/kg
IHL-RAT LC50: 5620 ppm/1H
SKN-RBT LD50: 1060 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: Acetic Acid, Glacial
Hazard Class: 8, Corrosive, Flammable liquid
UN Number: UN2789

N/A = Not applicable

Section 15 — Regulatory Information

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

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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