

## Material Safety Data Sheet (MSDS)

MSDS #: 6.00

Revision Date: March 14, 2001

### Section 1 — Chemical Product and Company Identification

#### Acetic Anhydride

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 Anhydride

Synonyms: acetic oxide, acetyl ether

CAS#: 108-24-7

### Section 3 — Hazards Identification

Colorless liquid with pungent 'vinegar-like' odor.

Corrosive, a lachrymator, and moderately toxic by ingestion and inhalation. Slightly toxic by skin absorption. Avoid contact with skin, eyes and mucous membranes. Avoid breathing vapor.

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.

Flash Point: 120 F (OC) Upper: 10.3% Lower: 2.7% Ait: 734 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-1

### 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 away from any source of water. Should store in a dedicated acid cabinet or Flinn Saf-Cube.

Use and dispense in a hood. Moisture sensitive material.

### 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 5 ppm, OSHA

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### Section 9 — Physical and Chemical Properties

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Clear, colorless liquid with pungent 'vinegar-like' odor.  
Solubility: Soluble in water.  
Formula: (CH<sub>3</sub>CO)<sub>2</sub>O  
Formula Weight: 102.09

Specific Gravity: 1.1  
Melting Point: -73 C  
Boiling Point: 282 F  
Vapor Pressure: 4 mm and 68 F

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### Section 10 — Stability and Reactivity

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Avoid contact with water, oxidizers, and alkalis. Reacts violently (sometimes delayed) with water.  
Shelf life: Good, if stored safely.

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### Section 11 — Toxicological Information

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Acute effects: corrosive, lachrymator  
Chronic effects: N.A.  
Target organs: Respiratory system, eyes and skin

ORL-RAT LD50: 1780 mg/kg  
IHL-RAT LC50: 1000 ppm/4H  
SKN-RBT LD50: 4 gm/kg

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

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### Section 12 — Ecological Information

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Data not yet available.

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### Section 13 — Disposal Considerations

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Please consult with state and local regulations.  
Flinn Suggested Disposal Method #24a is one option.

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### Section 14 — Transport Information

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Shipping Name: Acetic Anhydride  
Hazard Class: 8, Corrosive, Flammable Liquid  
UN Number: UN1715

N/A = Not applicable

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### Section 15 — Regulatory Information

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TSCA-listed, EINECS-listed (203-564-8). RCRA code D001, D002

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### Section 16 — Other Information

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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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