



SDS #: 6

Revision Date: July 13, 2015

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## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Acetic Anhydride

Signal Word  
**DANGER**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261  
Chemtrec Emergency Phone Number: (800) 424-9342

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 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).



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



Hazard class: Acute toxicity, inhalation (Category 4). Harmful if inhaled (H332). Avoid breathing mist, vapors or spray (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Acetic anhydride	108-24-7	(CH <sub>3</sub> CO) <sub>2</sub> O	102.09	
Synonyms: Acetic oxide, Acetyl ether				

### 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 swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331). Call a POISON CENTER or physician if you feel unwell (P301+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Class II combustible liquid.

NFPA Code

Flash point: 49 °C (CC) Flammable limits: Lower: 2.7% Upper: 10.3% Autoignition Temperature:

316 °C

When heated to decomposition, may emit toxic fumes.

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

H-3

F-2

R-1

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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. Keep dry. Reacts violently with water. Should store in a dedicated acid cabinet or Flinn Saf-Cube™. Keep cool (P235). Keep container tightly closed (P233). Use only in a hood or in a well ventilated area.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or in a well ventilated area.

Exposure guidelines: TLV 1 ppm Ceiling 3 ppm (ACGIH) PEL 5 ppm (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance: Clear, colorless liquid.	Boiling point: 140 °C
Odor: Pungent vinegar-like odor. Odor Threshold: 0.13 uL/L	Evaporation rate: 0.46
Soluble: Slowly in water. Reacts with water, exothermic. See Sections 7 and 10.	Melting point: -73 °C
Viscosity: 0.843 mPa-s @ 25 °C	Specific gravity: 1.08
Vapor Pressure: 0.680 kPa (5.1 mm Hg) @ 25 °C	Vapor density: 3.52
	Heavier than air

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with water, mineral acids, oxidizers, and alkalis. Reacts violently (sometimes delayed) with water. Forms ethyl acetate in solution with alcohol.

Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Exposure routes: inhalation, ingestion, skin and/or eye contact	ORL-RAT LD <sub>50</sub> : 1780 mg/kg
Acute effects: Corrosive to all body tissues, pulmonary edema.	IHL-RAT LC <sub>50</sub> : 1000 ppm/4 hour
Chronic effects: Pulmonary edema, blindness.	SKN-RBT LD <sub>50</sub> : 4 mL/kg
Target organs: Respiratory system, eyes and skin.	

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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 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 Anhydride. Hazard class: 8, Corrosive, Flammable Liquid. UN number: UN1715

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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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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.**

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