

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 10.00

Revision Date: April 27, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Acetyl Chloride

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

Acetyl Chloride

Synonyms: acetic acid chloride, ethanoyl chloride

CAS#: 75-36-5

SECTION 3 — HAZARDS IDENTIFICATION

Colorless, fuming liquid with a strong, pungent, vinegar-like odor.

Moderately toxic by ingestion and inhalation. Corrosive to skin and mucous membranes. Dangerous eye irritant. Avoid all body tissue contact.

Class 1B Flammable liquid, serious fire hazard.

FLINN AT-A-GLANCE

Health-2

Flammability-3

Reactivity-3

Exposure-3

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

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Give no more than 1-2 cups of water for dilution. Do not induce vomiting. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class 1B flammable liquid.

Flash Point: 40 °F (Closed Cup) Upper: 19% Lower: 7.3% Autoignition Temperature: 734 °F

When heated to decomposition, it can emit highly toxic fumes of phosgene and chlorine.

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

H-3

F-3

R-2

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 #1. Store with acids, anhydrides, and peracids.

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 chemical-resistant apron.

Use ventilation to keep airborne concentrations low. 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).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless, fuming liquid with a strong, pungent, vinegar odor.

Solubility: Soluble in ether, acetone, and acetic acid.

Formula: CH₃COCl

Formula Weight: 78.50

Specific Gravity: 1.105

Melting Point: -112 °C

Boiling Point: 52 °C

SECTION 10 — STABILITY AND REACTIVITY

Reacts violently with water and alcohol.

Shelf Life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: corrosive, lachrymator

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: 910 mg/kgIHL-RAT LC₅₀: N.A.SKN-RBT LD₅₀: N.A.

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 #1a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Acetyl Chloride

Hazard Class: 3, Flammable liquid, Corrosive

UN Number: UN1717

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-865-6), RCRA code U006.

SECTION 16 — OTHER INFORMATION

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