

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Aluminum Chloride Anhydrous

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-9377

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

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



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

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Aluminum chloride, anhydrous	7446-70-0	AlCl ₃	133.35	
Synonyms: Trichloro aluminum				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA Code

When heated to decomposition, may emit toxic fumes.

H-3

In case of fire: Use a tri-class dry chemical fire extinguisher.

F-0

R-2

No Water

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Keep moisture and water away from material. Gather up material in a pile (do not sweep). Dispose of material using Flinn suggested disposal method #1b. DO NOT dispose of in the trash.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #9. Store with acids, except nitric acid. Store in a dedicated acid cabinet and away from any source of water. Reacts violently with water to liberate HCl. If an acid cabinet is not available, store in a Flinn Saf-Cube™. Prolonged storage of anhydrous aluminum chloride in closed containers has resulted in spontaneous decomposition and occasional explosion upon opening the container. Store in a cool, dry place. Keep container tightly closed.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White to pale-yellow powder. Hydrochloric acid odor.	Melting point: 192 °C
Soluble: Water, reacts violently.	Specific gravity: 2.4

SECTION 10 — STABILITY AND REACTIVITY

Reacts violently with water forming hydrochloric acid and heat. Avoid contact with alcohols and water.
Shelf life: Poor. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive, irritant.	ORL-RAT LD ₅₀ : 3450 mg/kg
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: N.A.	SKN-RBT LD ₅₀ : 2 g/kg

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #1b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Aluminum chloride, anhydrous. Hazard class: 8, corrosive. UN number: UN1726.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-208-1), RCRA code D002, D003.

SECTION 16 — OTHER INFORMATION

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PRODUCT(S).

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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