

Aluminum Chloride Hexahydrate Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Aluminum Chloride Hexahydrate

Signal Word
WARNING

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9376

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

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

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Aluminum chloride hexahydrate	7784-13-6	AlCl ₃ 6H ₂ O	241.43	
Synonyms: Hexahydrate aluminum trichloride				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P301+P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If on skin: Immediately flush with water for at least 15 minutes. Take off contaminated clothing and wash before reuse (P362).

If in eyes: Rinse with water for several minutes. Remove contact lenses, if present, and continue rinsing (P305+P351+P338)

If swallowed: Rinse mouth. Give large quantities of water for dilution.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.
When heated to decomposition, may emit toxic fumes.
In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area and sweep up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

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

Moist, white crystals. Strong hydrochloric acid odor.	Boiling point (hexahydrate): 120 °C
Soluble: Water and alcohol	Melting point (hexahydrate): 0 °C
	Specific gravity (hexahydrate): 1.3

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids.
Shelf life: Poor, deliquescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Dust is an irritant.	ORL-RAT LD ₅₀ : 3311 mg/kg (hexahydrate)
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: N.A.	SKN-RBT LD ₅₀ : N.A.

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 #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-208-1).

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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