



MATERIAL SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Aluminum Chloride, Hexahydrate
SYNONYMS:
PRODUCT NUMBER: A127
CAS NO: 7784-13-6
NIOSH/RTECS NO: Not listed – (Anhydrous: BD0525000)
COMPANY INFO: *PhytoTechnology Laboratories*®
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent	Hazardous
Aluminum Chloride, Hexahydrate	7784-13-6	>97 %	ACGIH TLV: 2 mg (Al)/m ³

3. PHYSICAL & CHEMICAL PROPERTIES

Product Description: Aluminum Chloride, Hexahydrate
Formula: $AlCl_3 \cdot 6H_2O$
Molecular Weight: 241.43 g/mol
Storage Temperature: RT
pH (0.010 g/L): Under Development (3.25 – 4.25 suspected range)
Vapor Density: N/A
Melting Point: 100 °C (Dec)
Specific Gravity: 2.398 g/cm³
Solubility: Soluble in Water
Appearance: White to off-white powder
Odor: May have slight pungent odor

4. HAZARDS IDENTIFICATION

Label Hazard Warnings: Causes burns. Irritating to eyes, respiratory system, and skin
Label Precautionary Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
Laboratory Protective Equipment: Safety glasses, protective gloves, and lab coat

HMIS Rating:	Health	Flammability	Reactivity	Personal Protection Equipment
	3	0	0	N/A
NFPA Rating:	Health	Flammability	Reactivity	Special Hazards
	3	0	0	-

Storage and Handling Precautions: Store in a tightly sealed container in a cool, dry place. Do not breathe dust. Avoid incompatible substances. Wash thoroughly after handling

5. POTENTIAL HEALTH HAZARDS/ TOXICOLOGICAL INFORMATION

RTECS Info listed is for the anhydrous form

Toxicity:	LD ₅₀ (Oral-Rat)(mg/Kg):	3450
	LD ₅₀ (IPR-Rat)(mg/Kg):	333
	LD ₅₀ (Oral-Mouse)(mg/Kg):	1130
Carcinogenicity:	NTP:	No
	IARC:	No
	Z List:	No
	OSHA Reg:	No
Effects of Overexposure:	Irritation, itching, gastrointestinal upset, nausea, vomiting, eye damage, burns	
Target Organs:	Respiratory system, eyes	
Medical Conditions Aggravated By Exposure:	Pre-existing eye conditions	
Routes of Entry:	Inhalation, skin and eye contact	

The toxicological properties of this product have not been thoroughly investigated

6. EMERGENCY AND FIRST AID

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

7. FIRE HAZARDS & FIRE FIGHTING MEASURES

Flash Point (Closed Cup):	N/A	
Flammable Limits:	Upper – N/A %	Lower – N/A %
Fire Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.	
Special Fire-Fighting Procedures:	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.	
Unusual Fire & Explosion Hazards:	May emit toxic fumes under fire conditions.	
Toxic Gases Produced:	Hydrogen chloride	

8. REACTIVITY & CONDITIONS TO AVOID

Stability:	Stable under normal conditions of use and proper storage
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Excessive heat and moisture
Incompatibles:	Strong oxidizing agents, alkaline materials, organics
Hazardous Decomposition Products:	Hydrogen chloride, aluminum oxide

9. SPECIAL PRECAUTIONS/PROTECTIVE EQUIPMENT

Ventilation:	Ventilation hood recommended
Respiratory Protection:	A NIOSH/MSHA approved air purifying respirator is recommended where airborne concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited.
Eye/Skin Protection:	Have eye-washing facilities readily available where eye contact can occur. Wear chemical safety goggles. Use appropriate chemical protective gloves when handling. Showering and changing into street clothes after work is recommended.

10. SPILLS & LEAKS

Spill or Discharge:	Wear suitable protective clothing and a self-contained breathing apparatus if available. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water.
Disposal Procedure:	Dispose in accordance with all applicable federal, state, and local environmental regulations.
EPA Hazardous Waste Number:	N/A

11. TRANSPORTATION DATA

Domestic (D.O.T.):	Proper Shipping Name:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium chloride)
	Hazard Class:	8
	UN/NA:	3260
	Labels:	CORROSIVE
International: IMDG:	Proper Shipping Name:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium chloride)
	Hazard Class:	8
	UN/NA:	3260
	Labels:	CORROSIVE
IATA:	Proper Shipping Name:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium chloride)
	Hazard Class:	8
	UN/NA:	3260
	Labels:	CORROSIVE

12. REGULATORY INFORMATION

U.S. Federal Regulatory Information

TSCA: No – (Hydrates are not subject to TSCA)

SARA TITLE III:

Section 302 (EHS) Ingredients: No
Section 313 Ingredients: Yes
Section 304 (EHS/CERCLA) Ingredients: No

SARA TITLE III NOTIFICATION INFORMATION

Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No

International Regulatory Information

Risk Phrases: 34 – Causes burns
36/37/38 – Irritating to eyes, respiratory system, and skin

Safety Phrases: 26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
36 – Wear suitable protective clothing

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