Material Safety Data Sheet
Aluminum chloride, anhydrous, powder, 98.5%

Section 1 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: White.

DANGER! Corrosive. Water-reactive. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. Causes severe eye burns. Causes respiratory tract burns. Causes severe digestive tract burns.
Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects
Eye: Causes severe eye burns.
Skin: Contact with skin causes irritation and possible burns, especially if the skin is wet or moist.
Ingestion: Causes gastrointestinal tract burns. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract.
Inhalation: Causes delayed lung injury. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.
Chronic: Aluminum may be implicated in Alzheimer's disease. Inhalation of aluminum containing dusts may cause pulmonary disease.

Section 2 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.
Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.
Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

Section 3 - Personal Protection

Personal Protective Equipment
Eyes: Wear chemical goggles and a face shield.
Skin: Wear impervious gloves.
Clothing: Wear appropriate protective gloves to prevent skin exposure.
**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 4 - Physical and Chemical Properties

**Physical State:** Solid  
**Appearance:** White  
**Odor:** Strong acid odor.  
**pH:** Not available.  
**Boiling Point:** sublimes at 181 deg C  
**Freezing/Melting Point:** 194 deg C @ 2.5 atm  
**Decomposition Temperature:** Not available.  
**Solubility:** Reacts.

### Section 5 - Stability and Reactivity

**Chemical Stability:** Stable.  
**Conditions to Avoid:** Dust generation, exposure to moist air or water.  
**Incompatibilities with Other Materials:** Organic materials, Aluminum chloride reacts violently with water producing hydrochloric acid and heat.  
**Hazardous Decomposition Products:** Hydrogen chloride, aluminum oxide.  
**Hazardous Polymerization:** Has not been reported.