

PRODUCT NAME: ALUMINUM CHLORIDE SOLUTION

Transportation Emergencies, Call (800) 424-9300 (CHEMTREC)
Health Emergencies, contact Your Local Poison Center
Caution: Causes Irritation. Avoid contact with skin, eyes or clothing.

I. PRODUCT INFORMATION

Product Name: Aluminum Chloride Solution; Aluminum Chloride – Technical Grade
Formula: $\text{AlCl}_3 \cdot 6 \text{H}_2\text{O}$
Chemical Name: Aluminum Chloride, Aqueous **Chemical Family:** Inorganic Salt
CAS Number: 7784-13-6

Typical Composition	%
$\text{AlCl}_3 \cdot 6 \text{H}_2\text{O}$	50.7%
Water	49.3%

Exposure Standard:

Hazard Ratings: Health = 3 Flammability = 0 Reactivity = 2
0 = Least; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme;

OSHA 29 CFR 1910.1000 subpart Z has established a TWA of 2 mg/m^3 for aluminum in the form of soluble salts.

II. PERSONAL PROTECTION INFORMATION

Ventilation: Handle in open or well ventilated areas.

Eye: Prevent eye contact through the use of chemical safety glasses, goggles or a face shield.

Skin: Prevent skin contact through the use of protective clothing, gloves and footwear.

Respiratory: None for normal use.

III. HEALTH INFORMATION

EMERGENCY & FIRST AID PROCEDURES

Eyes: IMMEDIATELY flush with large quantities of water for at least 15 minutes. Prolonged and permanent visual impairment or loss of total vision may occur if material is not immediately removed. Seek medical attention.

Skin: Remove contaminated clothing and flush affected area for at least 15 minutes. If irritation persists continue rinsing with water and seek medical attention.

Ingestion: DO NOT induce vomiting. If conscious have victim rinse mouth then drink large amounts of water. Seek medical attention immediately.

SYMPTOMS OF OVEREXPOSURE

Permissible Concentration

(Air): 2 mg/M3 as Al to prevent irritation.

Acute: LD 50 orally in rats – 3750 mg/kg as AlCl₃ 6 H₂O

Chronic: Not available

IV. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and

Odor: Clear to water white to pale liquid. No odor.

Boiling Point: 110° C (230°F)

Freezing Point: -31° F

Volatile

(by weight %) Water 49.3%

Evaporation

Rate: No Data Available

Vapor Pressure:

(mm Hg @ 20°C) No Data Available

pH as is: Less than 1

Solubility in water: 100%

Specific Gravity: 1.3

(H₂O = 1)

Stability: Product is stable under normal conditions.

Viscosity SUS

@ 100° F: Less than 100

V. SPECIAL PRECAUTIONS

Handling and Storage

Precautions: DO NOT store in unlined metal containers.

VI. FIRE PROTECTION INFORMATION

Flash Point: N/A

**Flammable
Limits:**

N/A

Extinguishing

Agents: Use agent suitable for type of surrounding fire. Exposed material may be cooled with water.

Special Firefighting

Procedures: Water solution. Non-flammable.

Unusual Fire

& Explosion Hazards: In a fire, this product may build up pressure and rupture a sealed container. Spray container with water to keep cool.

Respiratory

Protection: May decompose to HCl in a fire. If fumes are present wear an OSHA/NIOSH approved full face mask with acid gas cartridge or self-contained breathing apparatus.

VII. TRANSPORTATION REQUIREMENTS

DOT Proper Shipping Name: Aluminum Chloride Solution

DOT Classification: 8, Corrosive

UN/NA Identification

Number: UN 2581

Labels: Corrosive

Packing Group: III

Special Note: DO NOT transport in unlined metal containers.

VIII. SPILL OR LEAK PROCEDURES**Procedure for**

Clean-up: Contain major spills to keep out of water sources and sewers. Minor residue may be washed off and neutralized with soda ash or absorbed on an inert material such as earth, sand or vermiculite.

Waste Disposal

Methods: Dispose of in accordance with all applicable federal, state, and local regulations.

IX. NSF CERTIFICATION

Aluminum Chloride manufactured at Chickasaw, AL and Lake Charles, LA are NSF-60 Certified. Maximum use in potable water is 70 mg/l.

SALES OFFICE

For Product Information:
TEL: 662-494-3055
FAX: 662-494-2828

Post Office Drawer 1217
West Point, MS 39773

To Place An Order:
TEL: 800-953-3585
FAX: 800-953-3588

IMPORTANT

The information on this Material Safety Data Sheet is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.