LTS Research Laboratories, Inc.
Safety Data Sheet
Aluminum Fluoride

1. Product and Company Identification

Trade Name:	Aluminum fluoride
Chemical Formula:	AlF_3
Recommended Use:	Scientific research and development
Manufacturer/Supplier:	LTS Research Laboratories, Inc.
Street:	37 Ramland Road
City:	Orangeburg
State:	New York
Zip Code:	10962
Country:	USA
Tel #:	855-587-2436 / 855-lts-chem
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger

Hazard Statements:
H300 Fatal if swallowed
H314 Causes severe skin burns and eye damage

Precautionary Statements:
P260 Do not breathe dust/fume/vapor
P301+P310 If swallowed: immediately call a poison center/doctor
P303+P361+P353 If on skin or hair: take off all contaminated clothing. Rinse with water.
P305+P351 If in eyes: Rinse cautiously with water for several minutes.

HMIS Health Ratings (0-4):

Health:	3
Flammability:	0
Physical:	1

3. Composition

Chemical Family:	Salt
Additional Names:	Aluminum trifluoride
Aluminum fluoride (AlF_3):	
Percentage:	0-100 wt%
CAS #:	7784-18-1
EC #:	232-051-1

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Do not induce vomiting; call for medical help.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Firefighting Measures

Flammability:	Non-flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Use neutralizing agent. Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	2.5 mg/m^3 as F, long-term value
Threshold Limit Value:	2.5 mg/m^3 as F, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	White
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	6.7 g/L
Boiling Point:	Sublimes
Melting Point:	1291 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	2.88 g/cc
Molecular weight:	83.9767 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, Water
Incompatible Conditions:	Moisture
Hazardous Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes serious damage
Skin:	Causes severe skin damage
Ingestion:	Toxic. Corrosive effect on mouth and throat; danger of perforation of esophagus and stomach.
Inhalation:	Causes serious damage
Chronic:	Fluorides may cause salivation, nausea, vomiting, diarrhea and abdominal pain, followed by weakness, tremors, shallow respiration, convulsions and coma. May cause brain and kidney damage. Chronic fluoride poisoning can cause severe bone changes, loss of weight, anorexia, anemia and dental defects. Aluminum may be implicated in Alzheimer's disease. Inhalation of aluminum containing dusts may cause pulmonary disease.

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	600 mg/kg
Carcinogen:	N/A

12. Ecological Information

Aquatic Toxicity:	Mild
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	Hazardous for transportation.

Hazard Class:	8 Corrosive substances
Packing Group:	II
UN Number:	UN3260
Proper Shipping Name:	Corrosive solid, acidic, inorganic, n.o.s. (Aluminum fluoride)
Segregation group:	Acids

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	No

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised:	03/03/2015