SAFETY DATA SHEET

Ammonium Bifluoride Flakes

Revised: 05/28/2026

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ammonium Bifluoride Flakes
Synonyms: azanium fluoride hydrofluoride, Ammonium Bifluoride
CAS Number: 1341-49-7
Grade/Purity: Technical
Product Type: Inorganic Compounds
Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574
Information: 512-365-6838 | www.alliancechemical.com
Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger
GHS Pictograms:

Hazard Statements:

H301	Toxic if swallowed [Danger Acute toxicity, oral]
H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]

Precautionary Statements:

P260,	P264, P270, P280, P301+P316, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P321, P330, P363, P405, and P501

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Ammonium Bifluoride Flakes	99.5	100.5	1341-49-7	215-676-4	F2H5N	57.044 g/mol

4. FIRST-AID MEASURES

Eyes	EYES: flush with water for at least 15 min.; consult physician.
Skin	SKIN: flush with water; treat burns.
Inhalation	INHALATION: remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Ingestion	INGESTION: perform gastric lavage with lime water or 1% calcium chloride solution; support respiration; call a physician.

5. FIRE-FIGHTING MEASURES

Suitable Media	Dry chemical, CO2, water spray. Use water spray to cool containers.
Unsuitable Media	Do not use a solid water stream as it may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

No established occupational exposure limits.

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	For mist or aerosol applications (e.g., spray, atomization, pressure washing), use a NIOSH-approved half-face air-purifying respirator with combination acid gas / P100 cartridges. For dust exposure, an N95 or P100 particulate filter is acceptable. Ensure local exhaust ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White crystalline flakes
Odor	Characteristic
Median Particle Size	Not Available
Particle Size Distribution	Not Available
Particle Shape	Not Available
Surface Area	Not Available
Dustiness	Not Available
Hygroscopicity	Not Available
pH	Not Available
Melting Point	125°C
Boiling Point	240°C
Flash Point	Not Available
Vapor Pressure	Not Available
Specific Gravity	1.5
Solubility	Highly soluble in water
Molecular Formula	F_2H_5N
Molecular Weight	57.044 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong acids, strong bases, reactive metals, water (for some concentrated forms).
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN1727, Ammonium hydrogen difluoride, solid, 8 (6.1), PG II
IMDG	UN1727, Ammonium hydrogen difluoride, solid, 8 (6.1), PG II
IATA/ICAO	UN1727, Ammonium hydrogen difluoride, solid, 8 (6.1), PG II
Marine Pollutant	No

15. REGULATORY INFORMATION

Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly.	
SARA 311/312	See Section 2 for hazard classifications.

16. OTHER INFORMATION

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