



Section 1 - Chemical Product and Company Identification

Product Name Ammonium Bifluoride pure, 98%
Product Code 13664
CAS No 1341-49-7
Use for Laboratory Chemicals.
Company Name Sisco Research Laboratories Pvt. Ltd.
Address 608, B Wing, Satellite Gazebo, Andheri Ghatkopar Link Road,
Andheri (E), Mumbai - 400 099, India

Section 2 - Composition/Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1341-49-7	Ammonium bifluoride	95	215-676-4
	Hazard Symbols:		T C
	Risk Phrases:		25 34

Section 3 - Hazards Identification



EMERGENCY OVERVIEW

Toxic if swallowed. Causes burns. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin: Contact with liquid is corrosive and causes severe burns and ulceration. May penetrate the skin and cause severe tissue and bone destruction. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion: Harmful if swallowed. May cause severe and permanent damage to the digestive tract. May cause kidney damage. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. Inorganic fluorides can be harmful. Acute exposure to fluorine compounds can lead to digestive tract burns, and abdominal pain. Fluoride can reduce calcium levels leading to fatal hypocalcemia. May cause systemic effects.

Inhalation: Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. Depletes calcium levels in the body which can lead to hypocalcemia and death. May cause systemic effects.

Chronic: Chronic inhalation and ingestion may cause chronic fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. May cause digestive tract disturbances. Effects may be delayed. Chronic exposure to fluoride compounds may cause systemic toxicity.

Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:



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Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes. Use only with adequate ventilation.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Keep away from acids. Keep away from strong bases. Store protected from moisture.

Section 8 - Exposure Control / Personal Protection



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Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 1341-49-7:

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State:	Solid
Color:	white
Odor:	Slightly pungent
pH:	3.5 @ 5% solution.
Vapor Pressure:	1 hPa @ 20 deg C
Viscosity:	Not available
Boiling Point:	239.5 deg C @ 760 mmHg (463.10°F)
Freezing/Melting Point:	125 deg C (257.00°F)
Autoignition Temperature:	Not applicable
Flash Point:	Not applicable.
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Decomposition Temperature:	Not available
Solubility in water:	630 G/L WATER (20°C)
Specific Gravity/Density:	1.50
Molecular Formula:	H5F2N
Molecular Weight:	57.04

Section 10 - Stability and Reactivity



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Chemical Stability:	Stable under normal temperatures and pressures. Deliquescent (tending to absorb atmospheric water vapor and become liquid).
Conditions to Avoid:	Dust generation, moisture, temperatures above 300°C.
Incompatibilities with Other Materials	Acids, bases.
Hazardous Decomposition Products	Hydrogen fluoride
gas, ammonia and/or derivatives.	
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 1341-49-7: BQ9200000
LD50/LC50:	RTECS: Not available. Other:
Carcinogenicity:	Ammonium bifluoride - IARC: Group 3 (not classifiable) (Fluorides, inorganic).
Other:	The hazard classification for this product is based on supplier information.

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

US DOT Canada TDG

Shipping Name:	AMMONIUM HYDROGENDIFLUORIDE, SOLID	AMMONIUM HYDROGENDIFLUORIDE, SOLID
Hazard Class:	8 8	
UN Number:	UN 1727 UN 1727	
Packing Group:	III III	



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Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols: T C Risk Phrases: R 25 Toxic if swallowed. R 34 Causes burns. Safety Phrases: S 22 Do not breathe dust. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37 Wear suitable gloves. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). WGK (Water Danger/Protection) CAS# 1341-49-7: 1 Canada CAS# 1341-49-7 is listed on Canada's DSL List

US Federal

TSCA CAS# 1341-49-7 is listed on the TSCA Inventory.

Section 16 - Other Information

Sisco Research Laboratories Pvt. Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.