According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 09.22.2017

Ammonium Biflouride Tech Grade

SECTION 1: Identification

Product identifier

Product name: Ammonium Biflouride Tech Grade Product code: AB2000

Recommended use of the product and restriction on use Relevant identified uses: Laboratory Chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Emergency telephone number: United States ChemTel: (24-hour) (US and Canada) 1-(800)-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Acute toxicity (oral), category 3 Acute toxicity (dermal), category 3 Acute toxicity (inhalation), category 3 Skin corrosion, category 1B Serious eye damage, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H301 Toxic if swallowed

H311 Toxic in contact with skin

- H331 Toxic if inhaled
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage

Precautionary statements:

P264 Wash skin thoroughly after handling P270 Do not eat, drink or smoke when using this product P280 Wear protective gloves/protective clothing/eye protection/face protection P271 Use only outdoors or in a well-ventilated area

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P260 Do not breathe dust/fume/gas/mist/vapors/spray

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse

P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell

P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician

P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P405 Store locked up

P403+P233 Store in a well ventilated place. Keep container tightly closed

P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1341-49-7	Ammonium Biflouride	100

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Move exposed individual to fresh air Call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Immediately remove all contaminated clothing Wash affected area with soap and water Seek medical attention if symptoms develop or persist Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

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Immediately call a POISON CONTROL CENTER or seek medical attention Do not induce vomiting Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

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Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Ammonium Biflouride	1341-49-7	ACGIH (TLV): 2.5 mg/m3, as F
United States (OSHA)	Ammonium Biflouride	1341-49-7	OSHA (PEL): 2.5 mg/m3, as F

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

A	
Appearance	White crystals
Odor	Odorless
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	125°C (257°C)
Initial boiling point/range	Not available.
Flash point (closed cup)	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper flammability/explosive limit	Not available.
Lower flammability/explosive limit	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Density	Not available.

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Relative density	1.500 g/cm3
Solubilities	Soluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto/Self-ignition temperature	Not available.
Decomposition temperature	Not available.
Dynamic viscosity	Not available.
Kinematic viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Toxic if swallowed Toxic in contact with skin Toxic if inhaled

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

Name	Result
Ammonium Biflouride	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

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Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available. **Substance data:** No data available.

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Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 1727
UN proper shipping name	Ammonium Hydrogendiflouride, Solid
UN transport hazard class(es)	8
Packing group	П
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN 1727
UN proper shipping name	Ammonium Hydrogendiflouride, Solid
UN transport hazard class(es)	8
Packing group	II
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 1727
UN proper shipping name	Ammonium Hydrogendiflouride, Solid
UN transport hazard class(es)	8
Packing group	II
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

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Listed

Listed

Ammonium Biflouride Tech Grade

United States regulations

Inventory listing (TSCA):

1341-49-7 Ammonium Biflouride

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not listed.

SARA Section 313 toxic chemicals: Not listed.

CERCLA:

1341-49-7	Ammonium Biflouride	Listed	100 lbs.	
1011 107		E10000	100 1001	

RCRA: Not listed.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

	1341-49-7	Ammonium Biflouride
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New Jersey Right to Know: NJ RTK Substance Number: 0089 NJ Assigned DOT Number: 1727 NJ Special Health Hazard Substance Corrosive (Special Health Hazard Substance if >= 1%): CO

New York Right to Know: The Reportable Quantity (RQ) for releases to air is: 5000 lbs. The Reportable Quantity (RQ) for releases to land or water is: 100 lbs.

Pennsylvania Right to Know: PA Environmental Hazard (subject to release reporting): E **California Proposition 65:** None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0

HMIS: 3-0-0 Initial preparation date: 09.22.2017

End of Safety Data Sheet