

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Ammonium Fluoride 40% Solution
CAS number	12125-01-8
Synonyms	N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
-----------------	-----------------------

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Dermal Toxicity	Category 3
Acute Oral Toxicity	Category 3
Acute Inhalation Toxicity	Category 3

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Toxic if swallowed, in contact with skin, or if inhaled.

Precautionary statements

Prevention: Avoid breathing vapours, dust, fume, gas. Wear protective gloves, protective clothing, eye protection, face protection.

Response: Call a POISON CENTER.

IF SWALLOWED: Immediately call a doctor.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua; H ₂ O	7732-18-5	60%
Ammonium fluoride	Ammonium fluorure	12125-01-8	40%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of skin contact

Wash with plenty of soap and water. Get medical advice/attention. Wash contaminated clothing before reuse.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

If swallowed

Rinse mouth. Obtain emergency medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2 Specific hazards arising from the substance or mixture

No information available.

5.3 Special protective equipment and precautions for firefighters

Do not enter fire area without proper protective equipment, including respiratory protection.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

On land, sweep or shovel into suitable containers. Collect spillage.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures

Do not eat, drink, or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a well-ventilated place. Keep container tightly closed.

Incompatibilities

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

No information available.

Personal protective equipment

Eye/face protection

Chemical goggles or safety glasses.

Skin protection

Protective gloves.

Body Protection

Wear suitable protective clothing.

Respiratory protection

Wear respiratory protection.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State	Liquid
Appearance	Colorless
Odor	No data available
Odor Threshold	No data available
pH	No data available
Melting Point/Range	No data available
Boiling Point/Range	No data available
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No data available
Vapor Density	No data available
Density	1.11 g/cm ³
Solubility	No data available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	NH ₄ F
Molecular Weight	37.037 g/mol
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium fluoride	100 mg/kg bodyweight	300 mg/kg bodyweight	700 ppmv/4h

Skin corrosion/irritation

Not classified.

Serious eye damage/eye irritation

Not classified.

Respiratory or skin sensitization

Not classified.

Germ cell mutagenicity

Not classified.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Ammonium fluoride	12125-01-8	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Reproductive toxicity

Not classified.

Chronic effects

Dermal: Toxic in contact with skin.

Inhalation: Toxic if inhaled.

Oral: Toxic if swallowed.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN2505
Proper Shipping Name	AMMONIUM FLUORIDE SOLUTION
Hazard Class	6.1
Packing Group	III

IMDG

UN-no	UN2505
Proper Shipping Name	AMMONIUM FLUORIDE SOLUTION
Hazard Class	6.1
Packing Group	III

IATA

UN-no	UN2505
Proper Shipping Name	AMMONIUM FLUORIDE SOLUTION
Hazard Class	6.1
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed, Ammonium fluoride (CAS #12125-01-8), RQ: 100 lb.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
See Section 2 for more information.

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) - Hazardous Substances

Listed, Ammonium fluoride (CAS #12125-01-8), RQ: 100 lb.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed, Ammonium fluoride (CAS #12125-01-8).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Ammonium fluoride (CAS #12125-01-8).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Ammonium fluoride (CAS #12125-01-8).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 02/12/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.