

MATERIAL SAFETY DATA SHEET (MSDS)
AMMONIUM BIFLUORIDE LR
1. Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Trade name : AMMONIUM BIFLUORIDE LR

Product code : A0023100500

 Identification of the product : Ammonium bifluoride
 CAS No :1341-49-7
 EC No :215-676-4
 Annex No :009-009-00-4

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

 Company identification SUVCHEM
 Chaitanya Tower, 2nd Floor, Office # 206,
 Siddharth Nagar, S.V. Road,
 Goregaon (West), Mumbai - 400062,
 Maharashtra, India.
 Contact: +91 22 28725393 / 94 / 95
 Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD
2.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45

 Classification : T; R25
 C; R34

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

 Health hazards : Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314
 Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318
 Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

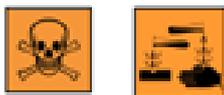
2.2. Label elements
Labelling EC 67/548 or EC 1999/45

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

2. Hazards identification -DSD (continued)

Symbol(s)



Symbol(s)

: T : Toxic
C : Corrosive

R Phrase(s)

: R25 : Toxic if swallowed.
R34 : Causes burns.

S Phrase(s)

: S1/2 : Keep locked up and out of reach of children.
S22 : Do not breathe dust.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 : Wear suitable gloves.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

Contains

: Ammonium bifluoride

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words

: Danger

Hazard statements

: H314 : Causes severe skin burns and eye damage.
H301 : Toxic if swallowed.

Precautionary statements

• **General**

: P102: Keep out of reach of children.
P103: Read label before use.
P101: If medical advice is needed, have product container or label at hand.

• **Prevention**

: P280: Wear protective gloves, protective clothing, eye protection, face protection.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

• **Response**

: P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.
P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.

• **Storage**

: P405: Store locked up.

• **Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

2. Hazards identification -DSD (continued)

Contains : Ammonium bifluoride

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : Ammonium bifluoride
CAS No :1341-49-7
EC No :215-676-4
Annex No :009-009-00-4
Substance.

Hazardous component(s) : This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Ammonium bifluoride	100 %	1341-49-7	215-676-4	009-009-00-4	----	T; R25 C; R34 ----- Acute Tox. 3 (oral) _ H301 Skin Corr. 1B _ H314 Eye Dam 1 _ H318

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

Skin contact : Immediately call a POISON CENTER or doctor. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.

Eye contact : 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.

Ingestion : Rinse mouth. Do NOT induce vomiting. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Swallowing a small quantity of this material will result in serious health hazard. Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

5. Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.
Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

- Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.
 Thermal decomposition generates : Corrosive vapours.

5.3. Advice for fire-fighters

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For emergency responders** : Equip cleanup crew with proper protection.
 Ventilate area.
For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust.
 Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

MATERIAL SAFETY DATA SHEET (MSDS)
AMMONIUM BIFLUORIDE LR
7. Handling and storage (continued)

- Handling** : Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not breathe dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product.
- Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

- Storage** : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
- Storage regulation** : Comply with applicable regulations.
- Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

- Specific end use(s)** : None.

8. Exposure controls/personal protection
8.1. Exposure controls

- Personal protection** : Avoid all unnecessary exposure.
- **Respiratory protection** : Wear approved mask.
 - **Hand protection** : Wear protective gloves.
 - **Skin protection** : Wear suitable protective clothing.
 - **Eye protection** : Chemical goggles or face shield.
 - **Others** : When using, do not eat, drink or smoke.

8.2. Control parameters

- Occupational Exposure Limits** : No data available.

9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

- Odour threshold** : No data available.
- Melting point [°C]** : 125 °C
- Decomposition point [°C]** : N/A
- Flammability (solid, gas)** : N/A
- Boiling point [°C]** : 2400C
- Evaporation rate** : N/A

MATERIAL SAFETY DATA SHEET (MSDS)
AMMONIUM BIFLUORIDE LR
9. Physical and chemical properties (continued)

Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm ³]	: 1,5
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: 41.5g/100 g Water @
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 3.5 (5% Solution)

9.2. Other information

Explosive properties	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity
10.1. Reactivity

Reactivity	: Not established.
------------	--------------------

10.2. Chemical stability

Chemical stability	: Stable under recommended storage conditions.
--------------------	--

10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
---------------------	--------------------

10.4. Conditions to avoid

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
---------------------	--

10.5. Incompatible materials

Materials to avoid	: Strong acids. Strong bases.
--------------------	-------------------------------

10.6. Hazardous decomposition products

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.
----------------------------------	---

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : Toxic if swallowed.

Corrosion

: Causes severe skin burns and eye damage.
Causes serious eye damage.

Irritation

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

Sensitization

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

Carcinogenicity

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

Toxic for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

12. Ecological information

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

13. Disposal considerations

13.1. Waste treatment methods

General	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Special precautions	: Hazardous waste due to toxicity.

14. Transport information

14.1. Land transport (ADR-RID)

Proper shipping name	: AMMONIUM HYDROGENDIFLUORIDE, SOLID
UN N°	: 1727
H.I. nr	: 80
ADR - Class	: 8
Labelling - Transport	: 8 : Corrosive substance.



ADR - Classification code	: C2
ADR - Group	: II
ADR - Packing instructions	: P002
ADR - Limited Quantity	: 1 KG
ADR - Tunnel code	



: E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name	: AMMONIUM HYDROGENDIFLUORIDE, SOLID
UN N°	: 1727
IMO-IMDG - Class or division	: 8 : Corrosive substance.
IMO-IMDG - Packing group	: II
IMO-IMDG - Packing instructions	: P002
IMO-IMDG - Limited quantities	: 1 kg
IMO-IMDG - Marine pollution	: No

MATERIAL SAFETY DATA SHEET (MSDS)
AMMONIUM BIFLUORIDE LR
14. Transport information (continued)

EMS-Nr : F-A S-B

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : AMMONIUM HYDROGENDIFLUORIDE, SOLID

UN N° : 1727

IATA - Class or division : 8 : Corrosive substance.

IATA - Packing group : II

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing instruction : 859

- Passenger and Cargo - Maximum Quantity/Packing : 15 kg

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 863

- Cargo only - Maximum Quantity/Packing : 50 kg

IATA - Limited Quantities : 5 kg

ERG-Nr : 8L

15. Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Revision : Revision - See : *

 Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
 vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM BIFLUORIDE LR

16. Other information (continued)

List of relevant R phrases (heading 3)	: R25 : Toxic if swallowed. R34 : Causes burns.
List of full text of H-statements in section 3	: H301 : Toxic if swallowed. H314 : Causes severe skin burns and eye damage. H318 : Causes serious eye damage.
Further information	: None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

DISCLAIMER:

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** 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.

End of document