

**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 : A0023105000

 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**

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#### 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.

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**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).

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**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**

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**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

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**9. Physical and chemical properties (continued)**

Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: 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.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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**10.5. Incompatible materials**

Materials to avoid	: Strong acids. Strong bases.
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**10.6. Hazardous decomposition products**

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

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#### 13. Disposal considerations

##### 13.1. Waste treatment methods

<b>General</b>	: 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.
<b>Special precautions</b>	: Hazardous waste due to toxicity.

#### 14. Transport information

##### 14.1. Land transport (ADR-RID)

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



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



: E : Passage forbidden through tunnels of category E.

##### 14.2. Sea transport (IMDG) [English only]

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



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#### 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

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**16. Other information (continued)**

<b>List of relevant R phrases (heading 3)</b>	: R25 : Toxic if swallowed. R34 : Causes burns.
<b>List of full text of H-statements in section 3</b>	: H301 : Toxic if swallowed. H314 : Causes severe skin burns and eye damage. H318 : Causes serious eye damage.
<b>Further information</b>	: 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.
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- **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.

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