

# MATERIAL SAFETY DATA SHEET (MSDS)

#### **AMMONIUM FLUORIDE LR**

## 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : AMMONIUM FLUORIDE LR

**Product code** : A0024105000 **Identification of the product** : Ammonium fluoride

CAS No :12125-01-8 EC No :235-185-9 Annex No :009-006-00-8

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; R23/24/25

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

Health hazards : Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331 Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311

2.2. Label elements

Labelling EC 67/548 or EC 1999/45



# MATERIAL SAFETY DATA SHEET (MSDS)

### **AMMONIUM FLUORIDE LR**

## 2. Hazards identification -DSD (continued)

Symbol(s)

**A** 

Symbol(s) : T : Toxic

R Phrase(s) : R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.

S Phrase(s) : S1/2 : Keep locked up and out of reach of children.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S45: In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

Contains : Ammonium fluoride

#### Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words : Danger

Hazard statements : H301 : Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

**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.

P271: Use only outdoors or in a well-ventilated area. P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position

comfortable for breathing.

P363: Wash contaminated clothing before reuse. P361: Remove immediately all contaminated clothing.

• **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.

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.

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.

P501: Dispose of this material and its container to hazardous or special waste



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

## 2. Hazards identification -DSD (continued)

collection point, in accordance with local, regional, national and/or international

regulation.

Contains : Ammonium fluoride

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 fluoride

CAS No :12125-01-8 EC No :235-185-9 Annex No :009-006-00-8

Substance.

 Substance name
 Contents
 CAS No
 EC No
 Annex No
 REACH Ref.
 Classification

 Ammonium fluoride
 :
 100 %
 12125-01-8
 235-185-9
 009-006-00-8
 --- T; R23/24/25

Acute Tox. 3 (skin) \_ H311 Acute Tox. 3 (inhal) \_ H331 Acute Tox. 3 (oral) \_ H301

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** : Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at

rest in a position comfortable for breathing. Immediately call a POISON CENTER or

doctor. Specific treatment (see on this label).

**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and

water, followed by warm water rinse. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated

clothing before reuse.

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or

redness persist.

Ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor. Specific treatment (see on this label).

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

Symptoms relating to use : Repeated exposure to this material can result in absorption through skin causing

significant health hazard.

Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.



# MATERIAL SAFETY DATA SHEET (MSDS)

#### **AMMONIUM FLUORIDE LR**

### 4. First aid measures (continued)

#### 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).

# 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.

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



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

## 6. Accidental release measures (continued)

See section 8. Exposure controls/personal protection

## 7. Handling and storage

#### 7.1. Precautions for safe handling

Handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas,

mist, vapours, spray. Do not eat, drink or smoke when using this product. Wash

thoroughly after handling.

**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

tightly closed.

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 : In case of insufficient ventilation, wear suitable respiratory equipment.

• Hand protection : Wear protective gloves.

Eye protection
Others
: Chemical goggles or safety glasses.
: 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

Physical state at 20 °C : Solid.

**Colour** : Colorless crystals



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

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

Odour : Odorless

Odour threshold : No data available. pH value : Not applicable.

Melting point [°C] : Sublimes upon heating

**Decomposition point [°C]** : N/A : N/A Critical temperature [°C] : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) : N/A Flash point [°C] : N/A Boiling point [°C] : N/A Initial boiling point [°C] : N/A Final boiling point [°C] **Evaporation rate** : N/A : N/A Vapour pressure [20°C] Vapour pressure mm/Hg : N/A Vapour density : N/A Density [g/cm3] : 1,01 Relative density, gas (air=1) : N/A

Solubility in water [% weight] : 100 g/l00 ml water @

: N/A

Solubility in water : N/A

Relative density, liquid (water=1)

**Log Pow octanol / water at 20°C** : No data available.

**Solubility** : Acidic aqueous solution.

Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

## 10. Stability and reactivity

10.1. Reactivity

**Reactivity** : Not established.

10.2. Chemical stability



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

## 10. Stability and reactivity (continued)

**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.

## 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity** 

• Inhalation : Toxic if inhaled.

• **Dermal** : Toxic in contact with skin.

• Ingestion : Toxic if swallowed.

Corrosion : Based on available data, the classification criteria are not met. Irritation : Based on available data, the classification criteria are not met. Sensitization : Based on available data, the classification criteria are not met. Mutagenicity : 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. : Based on available data, the classification criteria are not met. STOT-single exposure STOT-repeated exposure : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. **Aspiration hazard** 

#### 12. Ecological information

12.1. Toxicity

**Toxicity information** : Not established.



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

### 12. Ecological information (continued)

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.

#### 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 FLUORIDE

UN N° : 2505 H.I. nr : 60 ADR - Class : 6.1

**Labelling - Transport** : 6.1 : Toxic substances.



# MATERIAL SAFETY DATA SHEET (MSDS)

## **AMMONIUM FLUORIDE LR**

## 14. Transport information (continued)



ADR - Classification code : T5 T5

ADR - Group : III

ADR - Packing instructions : P002 R001 LP002

ADR - Limited Quantity : 5 KG

**ADR - Tunnel code** : E : Passage forbidden through tunnels of category E.



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

Proper shipping name : AMMONIUM FLUORIDE

UN N° : 2505

**IMO-IMDG - Class or division** : 6.1 : Toxic substances.

IMO-IMDG - Packing group : III

IMO- IMDG - Packing instructions : P002 LP02

IMO-IMDG - Limited quantities: 5 kgIMO-IMDG - Marine pollution: NoEMS-Nr: F-A S-A

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

Proper shipping name : AMMONIUM FLUORIDE

UN N° : 2505

IATA - Class or division : 6.1 : Toxic substances.

IATA - Packing group : |||

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 670

instruction

- Passenger and Cargo - Maximum : 100 kg

**Quantity/Packing** 

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 677 - Cargo only - Maximum Quantity/ : 200 kg

**Packing** 



# MATERIAL SAFETY DATA SHEET (MSDS)

### AMMONIUM FLUORIDE LR

### 14. Transport information (continued)

IATA - Limited Quantites : 10 kg **ERG-Nr** : 6L

## 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

: Ensure all national/local regulations are observed.

substance or mixture

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

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

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

List of relevant R phrases (heading 3): R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

List of full text of H-statements in

section 3

: H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

**Further information** : None.

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 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**