

## SAFETY DATA SHEET

### AMMONIUM HYDROGEN DIFLUORIDE LAB

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#### 1. Identification of the substance/preparation and of the company or firm

##### 1.1 Identification of the substance or preparation:

Catalogue no. : KA853

Product name : Ammonium hydrogen difluoride LAB

Synonym : Ammonium bifluoride

1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [ Office hours ]

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#### 2. Identification of dangers

##### 2.1 Classification of the substance.

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

Acute toxicity, Oral, Category 3: Toxic if swallowed.

Skin corrosion, Category 1B: Causes severe skin burns and eye damage.

##### 2.2 Label elements.

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

H301 : Toxic if swallowed.

H314 : Causes severe skin burns and eye damage.

Precautionary statements (P) :

P260 : Do not breathe vapours, spray, dust, fume, gas.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

P310 : Immediately call a POISON CENTER/doctor.

P301+P310 : IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P301+P330+P331 : IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water/shower.

P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

##### 2.3 Other hazards.

None known.

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#### 3. Composition/information on ingredients

##### 3.1 Substance / Preparation.

Ammonium hydrogen difluoride

Formular:  $\text{NH}_4\text{HF}_2$

CAS No : 1341-49-7

Molecular weight : 57.04

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

##### 3.2 Mixture.

Not applicable.

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#### 4. First-aid measures

##### 4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If unconscious, seek urgent medical assistance.

Skin contact: Remove contaminated clothing. Wash skin with water and soap or a suitable skin cleaner.  
Call a physician immediately.

Eyes: Wash with plenty of water, keeping eyelids open. Immediately call in ophthalmologist.

Ingestion: Rinse mouth. Never induce vomiting. Seek immediate medical assistance.

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

Toxic Product, can causes serious skin burns, eye and respiratory burns and allergic reactions. Inhalation can cause internal damage. Swallowing a small quantity will result in serious health hazard. If feeling unwell, seek immediate medical advice.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Seek immediate medical advice.

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**5. Fire-fighting measures**

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

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

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

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**6. Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

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**7. Handling and storage**

7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. Dry atmosphere. Away from sources of ignition and heat. Prevent the entry of non-authorised persons.

7.3 Specific end use(s).

None.

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**8. Exposure controls/personal protection**

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Hygiene measures : Remove contaminated clothing. Wash hands before breaks and when the job is done.

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**9. Physical and chemical properties**

9.1 Information on basic physical and chemical properties.

Appearance:	Solid.
Colour:	Colourless crystals.
Odour:	Odourless.
Odour threshold:	No data available.
pH value:	No data available.
Melting Point:	122 °C
Boiling Point:	238 °C
Flash point:	No data available.

Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	No data available.
Upper Explosive Limit:	No data available.
Solubility:	630 g/l (20°C)
Density:	No data available.
Relative density:	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	238 °C
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information.

None.

## 10. Stability and reactivity

### 10.1 Reactivity.

The product does not present hazards by their reactivity.

### 10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

### 10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

### 10.4 Conditions to avoid.

Avoid contact with incompatible materials and improper handling.

### 10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials.

### 10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive/oxidizing vapors or gases.

## 11. Toxicological information

### 11.1 Information on toxicological effects.

Acute toxicity.	LD50 Oral rat : 130 mg/kg
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.
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.
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.

Not established.

### 12.2 Persistence and Degradability.

Biodegradable.

### 12.3 Bioaccumulative potential.

Not established.

### 12.4 Mobility in soil

Not established.

### 12.5 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.

No information is available about other adverse effects for the environment.

### 13. Disposal considerations

#### 13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

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### 14. Transport information

#### 14.1 UN number.

UN No: UN1727

#### 14.2 UN proper shipping name.

ADR: UN 1727, AMMONIUM HYDROGENDIFLUORIDE, SOLID, 8, PG II, (E)

IMDG: UN 1727, AMMONIUM HYDROGENDIFLUORIDE, SOLID, 8, PG II

ICAO: UN 1727, AMMONIUM HYDROGENDIFLUORIDE, SOLID, 8, PG II

#### 14.3 Transport hazard class(es).

Class(es): 8

#### 14.4 Packing group.

Packing group: II

#### 14.5 Environmental hazards.

Marine pollutant: No.

#### 14.6 Special precautions for user.

Labels: 8

Hazard number: 80

ADR LQ: 1 kg

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A, S-B

Proceed in accordance with point 6.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

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### 15. Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

#### 15.2 Chemical safety assessment.

Not Scheduled.

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### 16. Other Information

#### Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

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.

#### Review number and date.

v. 1.0

#### Date published.

15-Apr-2016

#### Further information.

None.

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

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