



1911 Ammonium Hydrogen di-Fluoride

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

1.1 Identification of the substance or preparation

Name:

Ammonium Hydrogen di-Fluoride

Synonym:

Ammonium Bifluoride

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: product.safety@panreac.com

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

2. Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Acute Tox. 3

Skin Corr. 1B

Hazard Pictograms



Signal word

Danger

Hazard statements

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

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.

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

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

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

C Corrosive

R34

T Toxic

R25

For the full text of the R-phrases mentioned in this section, see section 16.

3. Component Composition/Information

Name: Ammonium Hydrogen di-Fluoride

Formula: $(\text{NH}_4)\text{HF}_2$ M.= 57,04 CAS [1341-49-7]

EC number (EINECS): 215-676-4

EC index number: 009-009-00-4

4. First aid**4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air. In the event of suffocation, proceed immediately to provide artificial respiration. Seek immediate medical assistance.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

4.5 Swallowing:

Drink large amounts of water. Avoid vomiting. Risk of perforation. Seek immediate medical assistance.

5. Fire-fighting means

5.1 Suitable fire-extinguishing means:

As appropriate to the environment.

5.2 Fire-fighting means which must NOT be used:

No specific data.

5.3 Special risks:

Incombustible.

5.4 Protective equipment:

Suitable clothing and footwear.

6. Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Do not inhale the dust. Avoid contact with the skin, eyes or clothing.

6.2 Precautions for care of the environment:

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

6.3 Methods for collection/cleaning:

Collect up dry and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

7. Handling and storage

7.1 Handling:

No special indications.

7.2 Storage:

Well sealed containers. In well ventilated premises. Restricted access, only authorized to technicians.

8. Staff exposure/protection controls

8.1 Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

8.2 Exposure limit control:

TLV-TWA: 2,5 mg/m³

VLA-ED: 2,5 mg/m³

8.3 Respiratory protection:

If dust forms, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves neopren PVC nitrile latex

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use complete protective equipment. Wash hands and face before breaks and when the job is done.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

Appearance: solid

Colour: White

Granulometry: N/A

Odour: Odourless.

pH: 3,5 (50 g/l)

Melting point/freezing point: 125 °C

Initial boiling point and boiling range:

N/A

Flash point: > 100 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: 1 hPa (20 °C)

Vapour density: N/A

Relative density:

N/A

Solubility: 630 g/l in water 20 °C

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: 239 °C

Viscosity: N/A

10. Stability and reactivity

10.1 Conditions which should be avoided:

The product is chemically stable under standard ambient conditions (room temperature).

10.2 Matter which should be avoided:

Silicon compounds. Glass. Acids. Heat

10.3 Hazardous decomposition products:

HF.

10.4 Complementary information:

Hygroscopic.

11. Toxicological information

11.1 Acute toxicity:

: Data not available.

11.2 Dangerous effects for health:

If dust inhaled: coughing Irritations to the respiratory tracts. The following cannot be ruled out: respiratory paralysis Upon contact with the skin: burns Irritations to the skin and mucosae. Penetration of the product causes injuries which are hard to cure. Through contact with the eyes: burns sight disorders Risk of blindness (irreversible injury of the optic nerve) If swallowed: Burns in the digestive apparatus Severe pains, with risk of perforation. Causes vomiting shock spasms respiratory paralysis death Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

12. Environmental information

12.1 Toxicity:

12.1.1 - EC50 test (mg/l):

Fish (P. promelas) 3638 mg/l

Classification:

Very toxic

Protozoa (U. parduczi).

Classification: Extr. toxic

Fish (Leuciscus Idus) (F-) 660 mg/l

Classification: Highly toxic

Bacteria (Ps. putida) (F-) 231 mg/l

Classification: Highly toxic

Algae (Sc. quadricauda) (F-) 249 mg/l

Classification: Highly toxic

Protozoa (E. sulcatum) (F-) 101 mg/l

Classification: Highly toxic

12.1.2. - Receptor medium: Risk for the water environment

Medium Risk for the land environment

Medium

12.1.3. - Observations:

The ecotoxicity is due to the ion F⁻, NH₄⁺

12.2 Persistence and Degradability :

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

12.3 Bioaccumulative potential:

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

13. Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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14. Information concerning transport

Overland (ADR):

Technical name: AMMONIUM HYDROGENDIFLUORIDE, SOLID

UN 1727 Class: 8 Packaging group: II (E)

By sea (IMDG):

Technical name: AMMONIUM HYDROGENDIFLUORIDE, SOLID

UN 1727 Class: 8 Packaging group: II

By air (ICAO-IATA):

Technical name: Ammonium hydrogendifluoride, solid

UN 1727 Class: 8 Packaging group: II

Packaging instructions: CAO 863 PAX 859

15. Regulatory information

The substance is subject to Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology.

16. Other information

Other precautionary statements

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

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

Labelling (65/548/CEE or 1999/45/CE)

R-phrase(s): **R34** Causes burns.
 R25 Toxic if swallowed.

S-phrase(s): **S45** In case of accident or if you feel unwell,
 seek medical advice immediately (show the label
 where possible).
 S37 Wear suitable gloves.
 S26 In case of contact with eyes, rinse
 immediately with plenty of water and seek
 medical advice.
 S22 Do not breathe dust.

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In respect of the previous review, changes have been made to the following sections: 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.