



Safety Data Sheet
According to Regulation (EC) 1907/2006
and (EU) 453/2010

3070 Hydrofluoric Acid 40%

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

1.1 Product identifier

Name:

Hydrofluoric Acid 40%

CAS: [7664-39-3]

REACH Registration Number: 01-2119458860-33-XXXX

1.2 Relevant identified uses of the substance or mixture:

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

2.1 Classification of the substance or the mixture.

Classification Regulation (CE) nº 1272/2008.

Acute Tox. 2

Acute Tox. 1

Acute Tox. 2

Skin Corr. 1A

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

C Corrosive
T+ Very toxic

R35
R26/27/28

2.2 Label elements:

Hazard Pictograms



Signal word

Danger

Hazard statements

H330 Fatal if inhaled.
H310 Fatal in contact with skin.
H300 Fatal if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash...thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

2.3 Other hazards:

No further relevant information available.

3. Composition/information on ingredients

Aqueous solution

Name: Hydrofluoric Acid 40%
Formula: HF M.= 20,01 CAS [7664-39-3]
EC number (EINECS): 231-634-8
EC index number: 009-003-00-1
REACH Registration Number: 01-2119458860-33-XXXX

4. First aid measures

4.1 General indications:

The first-aidler must be protected. 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. Seek immediate medical assistance.

4.4 Eyes:

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

4.5 Swallowing:

Risk of perforation. Drink large amounts of water or milk. Do not induce vomiting. Seek immediate medical assistance. Indications for the doctor: subsequent application, calcium gluconate.

5. Firefighting measures

5.1 Suitable extinguishing media:

As appropriate to the environment.

5.2 Unsuitable extinguishing media:

No specific data.

5.3 Special hazards arising from the substance or mixture:

Incombustible. Upon contact with metals, hydrogen gas may form (there is a risk of explosion). In the event of fire, toxic fumes may form: HF. Cool the recipients with water. Precipitate fumes formed with water. Do not allow extinguishing water into surface or underground water courses.

5.4 Advice for firefighters:

Suitable clothing and footwear. Self-contained breathing equipment.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not inhale the fumes.

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:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water. Treat with a mixture of lime in sodium carbonate solution (a precipitate of calcium fluoride is formed).

7. Handling and storage

7.1 Precautions for safe handling:

No special indications.

7.2 Conditions for safe storage, including any incompatibilities:

Storage between 15 and 20°C. Well sealed containers. In well ventilated premises. Away from light. Store in plastic containers. Do not store in glass containers. Do not store in metal containers. Restricted access, only authorized to technicians.

8. Exposure controls/personal protection

8.1 Exposure controls:

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

8.2 Control parameters:

VLA-EC(HF): 3 ppm = 2,5 mg/m³ VLA-ED(HF): 1,5 mg/m³ VLA-ED(HF): 1,8 ppm

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter B3.

8.4 Hand protection:

Use suitable gloves neopren

8.5 Eye/face protection:

Use safety glasses.

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: liquid

Colour: Colourless

Granulometry: N/A

Odour: Piquant.

pH:

N/A

Melting point/freezing point: -44 °C

Initial boiling point and boiling range: 112 °C

Flash point:

N/A

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: N/A

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repeticion

(20/4) 1,13 g/ml

Solubility: in () Soluble in water.

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

10. Stability and reactivity

10.1 Conditions to avoid:

High temperatures.

10.2 Incompatible materials:

Alkaline compounds. Metals. Alkaline metals. Glass. Silicon compounds.

10.3 Hazardous decomposition products:

Hydrogen fluoride - fumes.

10.4 Chemical stability:

No specific data.

11. Toxicological information

11.1 Acute toxicity:

LD L0 skn mus : 500 mg/kg

LC L0 inh hmn : 50 ppm 30 min

LC50 inh rat : 1276 ppm 1h

11.2 Dangerous effects for health:

If fumes inhaled: Irritations to the respiratory tracts. Very corrosive substance. May cause: bronchitis bronchopneumonia pulmonary oedema Upon contact with the skin: burns The following cannot be ruled out: necrosis Penetration of the product causes injuries which are hard to cure. Through contact with the eyes: burns blindness (irreversible injury of the optic nerve) If swallowed: Burns in the oesophagus and stomach. Severe pains, with risk of perforation. vomiting spasms Systemic effects: collapse Due to absorption: lethal effect Has latent effects. It is imperative to take countermeasures straight away.

12. Environmental information

12.1 Toxicity:

- EC50 test (mg/l):

Fish 40 - 60 mg/l

Classification:

Highly toxic

Algae (Elodea densa) 8 mg/l

Classification:

Extr. toxic

- Receptor medium:

Risk for the water environment

High

Risk for the land environment

High

- Observations:

Ecotoxic for water and land organisms due to the pH deviation. Major acute effects in the dumping area.

12.2 Persistence and Degradability :

- **Test:**

- **Biotic degradation classification:**

BOD5/COD

Biodegradability

- **Abiotic degradation depending on pH:**

- **Observations:**

Does not consume oxygen biologically.

12.3 Bioaccumulative potential:

- **Test:**

- **Bioaccumulation:**

Risk

- **Observations:**

Non-bioaccumulable product.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other adverse effects:

Generally, its effect is acutely considerable in the dumping area. Its long-term effect is not so considerable if the dumping is not frequent.

Do not allow it to enter soils or water channels.

The treatment is neutralization.

13. Disposal considerations

13.1 Waste treatment methods:

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. Transport information

Overland (ADR):

Technical name: HYDROFLUORIC ACID with not more than 60% hydrogen fluoride
UN 1790 Class: 8 6.1 Packaging group: II (E)

By sea (IMDG):

Technical name: HYDROFLUORIC ACID with not more than 60% hydrogen fluoride
UN 1790 Class: 8 6.1 Packaging group: II

By air (ICAI-IATA):

Technical name: Hydrofluoric acid

UN 1790 Class: 8 6.1 Packaging group: II

Packaging instructions: CAO 855 PAX 851

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

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P284 Wear respiratory protection.

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

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

P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

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.

P320 Specific treatment is urgent (see on this label).

P321 Specific treatment (see on this label).

P322 Specific measures (see on this label).

P330 Rinse mouth.

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

P361 Remove/Take off immediately all contaminated clothing.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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

R-phrase(s): **R35** Causes severe burns.
R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

S-phrase(s): **S45** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37 Wear suitable protective clothing and gloves.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S7/9 Keep container tightly closed and in a well-ventilated place.

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In respect of the previous review, changes have been made to the following sections: 7

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.