

# Safety Data Sheet According to Regulation (EU) 830/2015

# 1028 Hydrofluoric Acid 48%

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

## 1.1 Product identifier

Name:

Hydrofluoric Acid 48%

# **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)

# 2. Identification of dangers

# 2.1 Classification of the substance or the mixture.

Acute Tox. 2

Acute Tox. 1

Acute Tox. 2

Skin Corr. 1A

#### 2.2 Label elements:

# **Hazard Pictograms**



## Signal word

#### **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 no 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.

## 2.3 Other hazards:

No further relevant information available.

# 3. Composition/information on ingredients

## 3.1 Substances

Aqueous solution

Name: Hydrofluoric Acid 48%

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

#### 3.2 Mixtures

#### 4. First aid measures

#### 4.1 Description of first aid measures

The first-aider must be protected. Never provide drink or induce vomiting in the event of loss of consciousness.

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

No further relevant information available.

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

## **Swallowing:**

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

## Inhaling:

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

#### Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. Seek immediate medical assistance.

## **Eyes:**

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

# 5. Firefighting measures

# 5.1 Extinguishing media:

As appropriate to the environment.

## 5.2 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.

## **5.3** 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).

## 6.4 Reference to other sections

Not applicable

# 7. Handling and storage

## 7.1 Precautions for safe handling:

No special indications.

# 7.2 Conditions for safe storage, including any incompatibilities:

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. Storage between 15 and  $18^{\circ}\text{C}$ .

## 7.3 Specific end use(s)

No more relevant data available

# 8. Exposure controls/personal protection

## **8.1** Control parameters:

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

### 8.2 Exposure controls

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

Respiratory protection:

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

Hand protection:

Use suitable gloves neopren

Eye/face protection:

Use safety glasses.

Individual hygiene measures:

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

Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

# 9. Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Appearance: liquid Colour: Colourless Granulometry: N/A Odour: Piquant.

pH: N/A

Melting point/freezing point: -35 °C

Initial boiling point and boiling range: 106 °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: (20/4) 1,16 g/ml Solubility: Miscible with 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

## 9.2 Other information

No more relevant data available

# 10. Stability and reactivity

# 10.1 Reactivity

No specific data.

### 10.2 Chemical stability:

No specific data.

# 10.3 Possibility of hazardous reactions

No specific data.

# 10.4 Conditions to avoid:

High temperatures.

### 10.5 Incompatible materials:

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

# 10.6 Hazardous decomposition products:

Hydrogen fluoride - fumes.

## 11. Toxicological information

## 11.1 Information on toxicological effects

Acute toxicity:

LD L0 skn mus: 500 mg/kg

LC L0 inh hmn : 50 ppm 30 min LC50 inh rat : 1276 ppm 1h

# 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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#### 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

#### 14.1 UN number

UN1790

# 14.2 UN proper shipping name

HYDROFLUORIC ACID with not more than 60% hydrogen fluoride

# 14.3 Transport hazard class(es)

8

6.1

## 14.4 Packing group

ADR/IMDG: II

# 14.5 Environmental hazards

# 14.6 Special precautions for user

Not applicable

# 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

# 15. Regulatory information

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

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.

## 15.2 Chemical safety assessment

Not applicable

#### 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.

Version and revision date: 6 07.10.2017

Date published: 07.10.2017

In respect of the previous review, changes have been made to the following sections: 1.2.4.5.6.7.8.9.10.11.13.14.15

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.