



## 5997 Silicon \*standard solution Si=1,000+-0,002 g/l

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

#### 1.1 Identification of the substance or preparation

Name:

Silicon \*standard solution Si=1,000+-0,002 g/l

**Synonym:**

**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](mailto: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

Acute Tox. 3

Acute Tox. 3

Skin Corr. 1B

#### Hazard Pictograms



**Signal word**

Danger

**Hazard statements**

H331 Toxic if inhaled.

H311 Toxic in contact with skin.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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.

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.

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

C Corrosive

R34

T Toxic

R23/24/25

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

**3. Component Composition/Information**

Aqueous solution

Name: Silicon \*standard solution Si=1,000+-0,002 g/l

**Composition:****0001: 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

**Content:** 5 %**Classification Regulation (CE) n° 1272/2008.**

Acute Tox. 2

Acute Tox. 1

Acute Tox. 2

Skin Corr. 1A

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

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

**C** Corrosive

**T+** Very toxic

**R35** Causes severe burns.

**R26/27/28** Very toxic by inhalation, in contact with skin and if swallowed.

## 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. 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:**

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Indications for the doctor: subsequent application, calcium gluconate. Laxatives: sodium sulphate (1 soup-spoonful in 250 ml of water).

### **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. 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 Protective equipment:**

Suitable clothing and footwear. Self-contained breathing equipment.

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

#### **6.1 Individual precautions:**

Do not inhale the fumes. Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation.

#### **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 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 Handling:**

Ensure good ventilation and renewal of the air in the premises. Handle under an extractor fan.

## **7.2 Storage:**

Well sealed containers. In a cool, dry, well ventilated place. Store in plastic containers. Do not store in metal containers. 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:**

VLA-EC(HF): 2,5 mg/m<sup>3</sup>

VLA-EC(HF): 3 ppm

### **8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter B. Filter P3.

### **8.4 Hand protection:**

Use suitable gloves neopren

### **8.5 Eye protection:**

Use suitable goggles.

### **8.6 Individual hygiene measures:**

Use suitable work clothing. Remove contaminated clothing. Wash hands and face before breaks and when the job is done. Do not eat, drink or smoke in the workplace. Do not inhale the substance.

### **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: 0 °C

Initial boiling point and boiling range: 100 °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) 1,03

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A  
Viscosity: N/A

## **10. Stability and reactivity**

### **10.1 Conditions which should be avoided:**

High temperatures.

### **10.2 Matter which should be avoided:**

Alkaline hydroxides. Metals. Alkaline metals.

### **10.3 Hazardous decomposition products:**

Hydrogen fluoride - fumes.

### **10.4 Complementary information:**

No specific data.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

TDL0 oral man : 143 mg/kg Hg  
LC L0 inh man : 50 ppm Hg 30 min  
LC50 inh rat : 1610 ppm Hg 1h

### **11.2 Dangerous effects for health:**

Taking the preparation' components into account, the likely dangerous characteristics are as follows: If fumes inhaled: Irritations to the respiratory tracts. Upon contact with the skin: burns 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 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):

12.1.2. - Receptor medium:

Risk for the water environment

Risk for the land environment

12.1.3. - Observations:

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

### **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:

Data not available.

### **12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Non-bioaccumulable product.

### **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.

Do not allow it to enter the sewage system.

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

Despite dilution, the compound produces toxic mixtures with water.

DATA BASED on the components of the preparation.

## **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: CORROSIVE LIQUID, TOXIC, N.O.S.

UN 2922 Class: 8 6.1 Packaging group: II (E)

By sea (IMDG):

Technical name: CORROSIVE LIQUID, TOXIC, N.O.S.

UN 2922 Class: 8 6.1 Packaging group: II

By air (ICAI-IATA):

Technical name: Corrosive liquid, toxic, n.o.s.

UN 2922 Class: 8 6.1 Packaging group: II

Packaging instructions: CAO 855 PAX 851

## **15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 16. Other information

### Other precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face 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+P352 IF ON SKIN: 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.

P311 Call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

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): **R34** Causes burns.  
**R23/24/25** 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).  
**S35** This material and its container must be disposed of in a safe way.  
**S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

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