



## 5650 Silan-Sterol-1

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

#### 1.1 Identification of the substance or preparation

Name:

Silan-Sterol-1

#### 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.

Flam. Liq. 2

Acute Tox. 4

Acute Tox. 4

Acute Tox. 4

Eye Irrit. 2

Skin Irrit. 2

## Hazard Pictograms



### Signal word

Danger

### Hazard statements

H225 Highly flammable liquid and vapour.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H302 Harmful if swallowed.  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

|                           |           |
|---------------------------|-----------|
| <b>Xn</b> Harmful         | R36/38    |
| <b>F</b> Highly flammable | R20/21/22 |
|                           | R11       |

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

## 3. Component Composition/Information

Name: Silan-Sterol-1

### Composition:

#### 0001: Hexamethyldisilazane

Formula:  $(\text{CH}_3)_3\text{SiNHSi}(\text{CH}_3)_3$  M.= 161,41 CAS [999-97-3]  
EC number (EINECS): 213-668-5

**Content:**  $\leq 25 \%$

## **Classification Regulation (CE) nº 1272/2008.**

Flam. Liq. 2  
Acute Tox. 4  
Acute Tox. 4  
Acute Tox. 4  
Eye Irrit. 2  
STOT SE 3  
Skin Irrit. 2

### **Hazard Pictograms**



### **Signal word**

Danger

### **Hazard statements**

H225 Highly flammable liquid and vapour.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H302 Harmful if swallowed.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.

### Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P243 Take precautionary measures against static discharge.  
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.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
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.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

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

|                           |  |
|---------------------------|--|
| <b>Xn</b> Harmful         | <b>R36/37/38</b> Irritating to eyes, respiratory system and skin.                    |
| <b>F</b> Highly flammable | <b>RE20/21/22</b> Also harmful by inhalation, in contact with skin and if swallowed. |
|                           | <b>R11</b> Highly flammable.   |

### 0002: Pyridine

Formula: C<sub>5</sub>H<sub>5</sub>N    M.= 79,10    CAS [110-86-1]  
EC number (EINECS): 203-809-9  
EC index number: 613-002-00-7  
REACH Registration Number: 01-2119493105-40-XXXX

**Content:** >= 25 %

## Classification Regulation (CE) nº 1272/2008.

Flam. Liq. 2  
Acute Tox. 4  
Acute Tox. 4  
Acute Tox. 4

### Hazard Pictograms



### Signal word

Danger

### Hazard statements

H225 Highly flammable liquid and vapour.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H302 Harmful if swallowed.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P243 Take precautionary measures against static discharge.  
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.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P322 Specific measures (see on this label).  
P330 Rinse mouth.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P235 Store in a well-ventilated place. Keep cool.

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

**Xn** Harmful  
**F** Highly flammable

**R20/21/22** Harmful by inhalation, in contact with skin and if swallowed.  
**R11** Highly flammable.

### 0003: Chlorotrimethylsilane

Formula:  $(\text{CH}_3)_3\text{SiCl}$  M.= 108,64 CAS [75-77-4]

EC number (EINECS): 200-900-5

**Content:**  $\geq 5 \%$   $\leq 10 \%$

#### Classification Regulation (CE) n° 1272/2008.

Flam. Liq. 2

Skin Corr. 1A

STOT SE 3

#### Hazard Pictograms



#### Signal word

Danger

#### Hazard statements

H225 Highly flammable liquid and vapour.

EUH014 Reacts violently with water.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

### **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash...thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P321 Specific treatment (see on this label).  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

|                           |  |
|---------------------------|--|
| <b>C</b> Corrosive        | <b>R37</b> Irritating to respiratory system. |
| <b>F</b> Highly flammable | <b>R35</b> Causes severe burns.              |
|                           | <b>R14</b> Reacts violently with water.      |
|                           | <b>R11</b> Highly flammable.                 |

## **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 to provide artificial respiration.

### **4.3 Contact with the skin:**

Wash with plenty of water. Remove contaminated clothing.

### **4.4 Eyes:**

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

#### **4.5 Swallowing:**

Avoid vomiting. Risk of aspiration. Seek medical assistance. Avoid stomach lavage. Do not drink milk.

### **5. Fire-fighting means**

#### **5.1 Suitable fire-extinguishing means:**

Water. Carbon dioxide (CO<sub>2</sub>). Foam. Dry powder.

#### **5.2 Fire-fighting means which must NOT be used:**

No specific data.

#### **5.3 Special risks:**

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. May form explosive mixtures with the air. Risk of inflammation due to accumulation of electrostatic charges. In the event of fire, toxic fumes may form: NO<sub>x</sub>.

#### **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 fumes.

#### **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.

### **7. Handling and storage**

#### **7.1 Handling:**

No special indications.

#### **7.2 Storage:**

Well sealed containers. Dry atmosphere. In well ventilated premises. Away from sources of ignition and heat. Room temperature.

### **8. Staff exposure/protection controls**

#### **8.1 Technical protective measures:**

No special indications.

#### **8.2 Exposure limit control:**

: Data not available.



### **8.3 Respiratory protection:**

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

### **8.4 Hand protection:**

Use suitable gloves

### **8.5 Eye protection:**

Use suitable goggles.

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

Remove contaminated clothing. Use suitable work clothing. 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:

N/A

Granulometry: N/A

Odour: Unpleasant, characteristic.

pH:

N/A

Melting point/freezing point: N/A

Initial boiling point and boiling range:

N/A

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:

N/A

Solubility:

N/A

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:**

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

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

Nitric acid. Anhydrides. Fluorine. Halogen halides. Chromates. Perchromates. Nitrogen oxides. Sulphur oxides.

## **10.3 Hazardous decomposition products:**

No specific data.

## **10.4 Complementary information:**

Hygroscopic. The gases/fumes can form explosive mixtures with the air.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

LD50 oral rat : 891 mg/kg

LD50 skn rbt : 1.121 mg/kg

LC L0 inh rat : 4000 ppm (V) 4h

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

Upon contact with the skin: Irritations to the skin and mucosae. If swallowed: nausea vomiting headaches anxiety insomnia In high concentrations: cardiovascular disorders collapse narcosis Risk of cutaneous absorption. Chronic effects hepatic problems kidney problems Easily detectable due to its characteristic unpleasant smell, tolerable at low levels.

## **12. Environmental information**

### **12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

Bacteria (*Photobacterium phosphoreum*) 2120 mg/l

Classification:

Very toxic

Algae (*M. aeruginosa*) EC0 28

Classification:

Extr. toxic

Algae (*Sc. quadricauda*) EC0 120

Classification: Highly toxic

Crustaceans (*Daphnia magna*) 240 mg/l

Classification: Highly toxic

Fish (*Leuciscus Idus*) 225 mg/l

Classification: Highly toxic

Protozoa (*E. sulcatum*) EC0 240

Classification: Highly toxic

12.1.2. - Receptor medium: Risk for the water environment

Medium Risk for the land environment

Low 12.1.3. - Observations:

Ecotoxicity in line with the dumping concentration. Low chronic ecotoxicity.

### **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:

Product with a low bioaccumulative potential.

### **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:**

Pollutant product.

Do not allow it to enter soils or water channels.

Risk of formation of explosive fumes on the surface of the water.

DATA BASED on the components of the preparation.

(Major component:

## **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: FLAMMABLE LIQUID, N.O.S.

UN 1993 Class: 3 Packaging group: II (D/E)

By sea (IMDG):

Technical name: FLAMMABLE LIQUID, N.O.S.

UN 1993 Class: 3 Packaging group: II

By air (ICAI-IATA):

Technical name: Flammable liquid, n.o.s.

UN 1993 Class: 3 Packaging group: II

Packaging instructions: CAO 364 PAX 353

## **15. Regulatory information**

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

## 16. Other information

### Other precautionary statements

P243 Take precautionary measures against static discharge.  
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.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
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.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction.  
P403+P235 Store in a well-ventilated place. Keep cool.

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

R-phrase(s):     **R36/38** Irritating to eyes and skin.  
                      **R20/21/22** Harmful by inhalation, in contact with skin and if swallowed.  
                      **R11** Highly flammable.

S-phrase(s):     **S36/37/39** Wear suitable protective clothing, gloves and eye/face protection.  
                      **S28a** After contact with skin, wash immediately with plenty of water.  
                      **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

Date published: 3.11.10

Review number and date: 3 3.11.10