

# Safety Data Sheet

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

### 1.1. Product identifier

Code: CS0011-06201  
Product name: SILCOFLEX 581

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: Multipurpose silicone sealant, contains Polysiloxane and acetoxy curing agents.

### 1.3. Details of the supplier of the safety data sheet

Name: PIGAL s.p.a.  
Full address: Via G. Rossa, 2  
District and Country: 40056 Crespellano (BO)  
ITALIA  
Tel. +39 051969068  
Fax +39 051969353

e-mail address of the competent person

responsible for the Safety Data Sheet: health.safety@pigal.it; pigalab@pigal.it

### 1.4. Emergency telephone number

For urgent inquiries refer to: +39 051969068 ore ufficio (8.30-13; 14-17.30) 118 (contattare il centro antiveleni più vicino)

## 2. Hazards identification.

### 2.1. Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

### 2.2. Label elements.

This product is not subject to hazard labeling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

Warning symbols: None.

Hazard sentences (R): None.

Caution recommendations (S): None.

Safety data sheet available for professional users on request.

### 2.3. Other hazards.

During crosslinking, releases ACETIC ACID (CAS 64-19-7) by Triacetoxysilane hydrolysis.

## 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
<b>Distillates (petroleum), intermediate fraction hydrotreated</b>			
CAS. 64742-46-7	35 - 37,5	Xn R65, Note H N	Asp. Tox. 1 H304
EC. 265-148-2			
INDEX. 649-221-00-X			
<b>triacetoxymethylsilane</b>			
CAS. 4253-34-3	2 - 2,5	R14, C R34, Xn R22	Acute Tox. 4 H302, Skin Corr. 1C H314
EC. 224-221-9			
INDEX. -			
<b>triacetoxymethylsilane</b>			
CAS. 17689-77-9	2 - 2,5	R14, C R34, Xn R22	Acute Tox. 4 H302, Skin Corr. 1B H314, EUH014
EC. 241-677-4			
INDEX. -			
<b>ACETIC ACID</b>			
CAS. 64-19-7	released	R10, C R35, Note B	Flam. Liq. 3 H226, Skin Corr. 1A H314, Note B
EC. 200-580-7			
INDEX. 607-002-00-6			

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)  
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

## 4. First aid measures.

### 4.1. Description of first aid measures.

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes.

Seek medical advice.

SKIN: Immediately wash with plenty of water. Remove all contaminated clothing. Obtain immediate medical attention. Wash contaminated clothing separately before using them again.

INHALATION: Remove to open air. If breathing is irregular or stopped, administer artificial respiration. Obtain immediate medical attention.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Give nothing by mouth to an unconscious person.

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

For symptoms and effects caused by the contained substances see chap. 11.

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

Information not available.

## 5. Firefighting measures.

### 5.1. Extinguishing media.

#### SUITABLE EXTINGUISHING MEDIA

The extinction equipment to be used is the conventional kind: carbon dioxide, foam, powder and nebulised water.

#### EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

#### 5.2. Special hazards arising from the substance or mixture.

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion.

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

#### 5.3. Advice for firefighters.

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist) work gloves (fireproof, cut proof and antistatic), self-respirator (self-protector).

## 6. Accidental release measures.

#### 6.1. Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions.

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

#### 6.3. Methods and material for containment and cleaning up.

Use inert absorbent material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

## 7. Handling and storage.

#### 7.1. Precautions for safe handling.

Do not smoke while handling and use.

#### 7.2. Conditions for safe storage, including any incompatibilities.

Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

### 7.3. Specific end use(s).

Information not available.

## 8. Exposure controls/personal protection.

### 8.1. Control parameters.

Name	Type	Country	TWA/8h		STEL/15min	
			mg/m3	ppm	mg/m3	ppm
ACETIC ACID	OEL	IRL		10		15
	OEL	EU	25	10		
	TLV-ACGIH			10		15

### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration.

#### HAND PROTECTION

Protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves` limit depends on the duration of exposure.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

#### RESPIRATORY PROTECTION

If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company`s prevention and protection service is exceeded, wear a mask with an A or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

#### EYE PROTECTION

Use of protective airtight goggles (ref. standard EN 166) recommended.

## 9. Physical and chemical properties.

### 9.1. Information on basic physical and chemical properties.

Appearance	pasty
Colour	transparent
Odour	characteristic
Odour threshold.	Not available.
pH.	Not available.
Melting or freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	> 150 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.

Vapour pressure.	< 0,75 mmHg
Vapour density	Not available.
Specific gravity.	0,98 Kg/l
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available.
Ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.

## 9.2. Other information.

VOC (Directive 1999/13/EC) :	1,00 % - 9,80 g/litre.
VOC (volatile carbon) :	0,40 % - 3,92 g/litre.
Can pressure:	N.A.

## 10. Stability and reactivity.

### 10.1. Reactivity.

The product may react exothermically on contact with strong oxidizing agents or reducers, strong acids or bases.

### 10.2. Chemical stability.

Excessively high temperatures can cause thermal decomposition.

### 10.3. Possibility of hazardous reactions.

See paragraph 10.1.

ACETIC ACID: risk of explosion on contact with: chromium (IV) oxide, potassium permanganate, sodium peroxide, perchloric acid, phosphorus chloride, hydrogen peroxide. Can react dangerously with: alcohols, bromine pentafluoride, chlorosulphuric acid, dichromate-sulphuric acid, ethane diamine, ethylene glycol, potassium hydroxide, strong bases, sodium hydroxide, strong oxidising agent, nitric acid, ammonium nitrate, potassium tert-butoxide, oleum. Forms explosive mixtures with air.

### 10.4. Conditions to avoid.

Avoid heating the product.

ACETIC ACID: avoid exposure to sources of heat and naked flames.

### 10.5. Incompatible materials.

Oxidizing agents or reducers, strong acids or bases.

ACETIC ACID: carbonates, hydroxides, many oxides and phosphates. Oxidising substances and bases.

### 10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

## 11. Toxicological information.

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled carefully according to good industrial practices. This product may have slight health effects on sensitive people, by inhalation and/or cutaneous absorption and/or contact with eyes and/or ingestion.

#### 11.1. Information on toxicological effects.

##### ACETIC ACID

LD50 (Oral): 3310 mg/kg Rat

LC50 (Inhalation): 11,4 mg/l/4h Rat

LD50 (Dermal): 1060 mg/kg Rabbit

triacetoxymethylsilane

LD50 (Oral): 1600 mg/kg Rat

## 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

#### 12.1. Toxicity.

Information not available.

#### 12.2. Persistence and degradability.

The paraffinic hydrocarbons fraction may be considered biodegradable in water and in air. They distribute mostly in the air. The small non biodegradable amount which spreads into water tends to accumulate in fish.

#### 12.3. Bioaccumulative potential.

Information not available.

#### 12.4. Mobility in soil.

Information not available.

#### 12.5. Results of PBT and vPvB assessment.

Information not available.

#### 12.6. Other adverse effects.

Information not available.

## 13. Disposal considerations.

The valid EEC waste code are largely source-related; the manufacturer is, therefore, unable to specify waste codes for products used in various sectors. Small quantities of cured product can be treated as industrial waste similar to MSW.  
CER-code (suggested): 08 04 10.

#### 13.1. Waste treatment methods.

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 14. Transport information.

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

## 15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Contained substance.

None.

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Healthcare controls.

Information not available.

### 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

## 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>H226</b>	Flammable liquid and vapour.
<b>H302</b>	Harmful if swallowed.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H314</b>	Causes severe skin burns and eye damage.

<b>H314</b>	Causes severe skin burns and eye damage.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>EUH014</b>	Reacts violently with water.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

<b>R10</b>	FLAMMABLE.
<b>R14</b>	REACTS VIOLENTLY WITH WATER.
<b>R22</b>	HARMFUL IF SWALLOWED.
<b>R34</b>	CAUSES BURNS.
<b>R35</b>	CAUSES SEVERE BURNS.
<b>R65</b>	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

#### GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
13. ECHA website

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

#### Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.