Safety data sheet

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

1.1. Product identifier

Code:	**CS0001-06290 e seg.**
Product name	**SILCOFLEX 589**

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.r.l.**
Full address	**Via G. Rossa, 2**
District and Country	**40053 VALSAMOGGIA - 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/office hours (8.30-13; 14-17.30)** **118 (contattare il centro antiveleni più vicino)/please contact your near local poison control center**

SECTION 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 EC Regulation 1272/2008 (CLP).
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.
Hazard classification and indication:

2.2. Label elements

Hazard pictograms: --

Signal words: --

Hazard statements:

--

Precautionary statements:

--

Product not intended for uses provided for by Dir. 2004/42/CE.

Contains 4,5-dichloro-2-n-octyl-4-isothiazolinone. May cause allergic reactions. Safety data sheet available on request.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

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

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:
The full wording of hazard (H) phrases is given in section 16 of the sheet.

The classification of the Distillates (petroleum) is followed by taking into account the respective applicable notes of Annex VI of the EC Regulation 1272/2008.

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Distillates (petroleum), intermediate fraction hydrotreated		
CAS	8,5 ≤ x < 10	Asp. Tox. 1 H304, Note N
EC 265-148-2		
INDEX		
Reg. no. 01-2119552497-29		
Triacetoxyethylsilane		
CAS 17689-77-9	2,5 ≤ x < 3	Acute Tox. 4 H302, Skin Corr. 1B H314, EUH014
EC 241-677-4		
INDEX -		
Reg. no. 01-2119881778-15		
Ethyl/Methyl acetoxy silane (oligomers)		
CAS	1,5 ≤ x < 2	Skin Corr. 1B H314
EC		
INDEX -		
ACETIC ACID		
CAS 64-19-7	released	Flam. Liq. 3 H226, Skin Corr. 1A H314, Note B
EC 200-580-7		
INDEX 607-002-00-6		

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
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.

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
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Danger of slipping. Do not walk on spilled material.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

To avoid adhesion, sprinkle the surface with sand and collect the material mechanically.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
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.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012

HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

ACETIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	25	10	50	20
MAK	DEU	25	10	50	20
VLA	ESP	25	10	37	15
TLV	GRC	25	10	37	15
GVI	HRV	25	10		
OEL	EU	25	10	50	20
TLV-ACGIH		25	10	37	15

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION
Protect hands with Protective gloves in butyl rubber (Material thickness:> 0.3 mm, breakthrough time:> 480 min). Nitrile rubber gloves (Material thickness:> 0.1 mm; breakthrough time: 60-120 min) - see standard EN 374.
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a Gas Filter ABEK (certain gases and vapors inorganic and organic acids; ammonia / amines), in accordance with recognized standards such as EN 14387. In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with

environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	pasty
Colour	various
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / 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	Not available
Vapour density	Not available
Relative density	1,00 - 1,03
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	400 °C
Decomposition temperature	Not available
Viscosity	ca. 800000 mPa*s
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2010/75/EC) :	1,00 % - 10,10 g/litre
VOC (volatile carbon) :	0,40 % - 4,04 g/litre
Can pressure:	N.A.

Ref. to 9.2 solubility in water: hydrolytic decomposition occurs. pH: the product has acid reaction with water.

Explosion limits for released acetic acid: 4-17% Vol.

SECTION 10. Stability and reactivity

10.1. Reactivity

No dangerous reaction known if stored and handled as prescribed.

10.2. Chemical stability

Stable if stored and handled as prescribed.

10.3. Possibility of hazardous reactions

The product may react violently with water.

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

10.4. Conditions to avoid

Avoid overheating. Prevent moisture or water from penetrating inside the containers.

ACETIC ACID
Avoid exposure to: sources of heat,naked flames.

Protect from moisture.

10.5. Incompatible materials

ACETIC ACID
Incompatible with: carbonates,hydroxides,phosphates,oxidising substances,bases.

Reacts with: water, basic substances and alcohols. The reaction takes place with formation of acetic acid.

10.6. Hazardous decomposition products

In the case of hydrolysis: acetic acid. Measurements have shown that at temperatures higher than 150 ° C, for oxidative decomposition, is liberated a small amount of formaldehyde.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

In the face of available data there are no acute toxic effects after a single dermal exposure. Given the available data there are no acute toxic effects after a single oral exposure.

Distillates (petroleum), intermediate fraction hydrotreated
Distillates (petroleum), intermediate "hydrotreating" - According to literature the aliphatic and naphthenic hydrocarbons have a slightly irritating effect on the epidermis and mucous membranes. Degrease the skin. Narcotic. In the case of direct action on lung tissues (eg. By aspiration) can cause pneumonia.

Metabolism, toxicokinetics, mechanism of action and other information
Information not availableInformation not available

Information on likely routes of exposure
Information not availableInformation not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not availableInformation not available

Interactive effects
Information not availableInformation not available

ACUTE TOXICITY
LC50 (Inhalation - vapours) of the mixture:LC50 (Inhalation - vapours) of the mixture:
Not classified (no significant component)
LC50 (Inhalation - mists / powders) of the mixture:LC50 (Inhalation - mists / powders) of the mixture:

Not classified (no significant component)
LD50 (Oral) of the mixture:LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:LD50 (Dermal) of the mixture:
Not classified (no significant component)

ACETIC ACID
3310 mg/kg Rat
LD50 (Oral)
1060 mg/kg Rabbit
LD50 (Dermal)
11,4 mg/l/4h Rat
LC50 (Inhalation)

LD50 (skin) > 2009 mg/kg Rabbit.

SKIN CORROSION / IRRITATION
Does not meet the classification criteria for this hazard class

Non-irritating (<5% acetoxy silanes, OECD 404)

SERIOUS EYE DAMAGE / IRRITATION
Does not meet the classification criteria for this hazard class

Non-irritating (<5% acetoxy silanes, OECD 405)

RESPIRATORY OR SKIN SENSITISATION
Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE
Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

Due to the physico-chemical properties of the product is not expected aspiration hazard.

SECTION 12. Ecological information

12.1. Toxicity

The classification of this material in relation to environmental hazards is based on data on the ingredients and the amount of biocide available by elution in water simulation tests.

Related to the product:
LC50/96 h: > 10 - < 100 mg/l (calcolated - Oncorhynchus mykiss)

EC50/48 h: > 10 - < 100 mg/l (calcolated - Daphnia magna)
ErC50/24 h (growth rate): > 10 - < 100 mg/l calcolated - Navicula pelliculosa)
NOEC (growth rate): > 1 mg/l (calcolated - Navicula pelliculosa)
NOEC (early life stage test): > 1 mg/l (calcolated Oncorhynchus mykiss)
NOEC (reproduction): > 1 mg/l (calcolated - Daphnia magna)

4,5-dichloro-2-n-octyl-4-isothiazolinone
LC50/96 h: 0,0027 mg/l (Oncorhynchus mykiss, OECD 203)
EC50/48 h: 0,0052 mg/l (Daphnia magna, OECD 202)
ErC50/24 h (growth rate): 0,0016 mg/l (Navicula pelliculosa, OECD 201)
NOEC/24 h (growth rate): 0,00034 mg/l (Navicula pelliculosa, OECD 201)
NOEC/97 d (early life stage test): 0,00056 mg/l (Oncorhynchus, OECD 210)
NOEC/21 d (reproduction): 0,00063 mg/l (Daphnia magna, OECD 211)
Analysis on the basis of physical and chemical properties: no harmful effects on the organisms present in the water. At present experiences are no adverse effects on water purification plants.

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.

ACETIC ACID

Solubility in water	> 10000 mg/l

Rapidly biodegradable

Silicone content: Not biodegradable. The hydrolysis product (acetic acid) is readily biodegradable.

12.3. Bioaccumulative potential

Biologic accumulation is unlikely.

ACETIC ACID

Partition coefficient: n-octanol/water	-0,17

12.4. Mobility in soil

Polymeric component: Insoluble in acqua.Allo state not soluble in water. Easily separable from water by filtration.

ACETIC ACID

Partition coefficient: soil/water	1,153

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
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.

The valid EEC waste code are largely source-related; the manifacturer 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.

SECTION 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.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None

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

None

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisarion (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

Information on the status of international registration - Listed on or in accordance with the following inventories:
REACH - Europe
ECL - Korea
AICS - Australia
IECSC - China
PICCS - Philippines
TSCA - USA
TCSI - Taiwan

15.2. Chemical safety assessment

The result of the safety assessment does not require the indication of exposure scenarios and uses in the safety data sheet.

SECTION 16. Other information

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

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
EUH014	Reacts violently with water.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition

- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

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.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:
The following sections were modified:
15.