Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **CS0004.-04275**

Product name **SIL GASKET acetico**

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

Intended use **Silicone for high temperature sealing, mechanical industry; acetic crosslinking.**

Consumer uses [SU21], Professional uses [SU22] - Adhesive / sealant.

1.3. Details of the supplier of the safety data sheet

Name **PIGAL S.R.L. A SOCIO UNICO**

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 **118 (contattare il centro antiveleni più vicino)/please contact your near local poison control center**

+39 051969068 ore ufficio/office hours (8.30-13; 14-17.30)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 3	H229	Pressurised container: may burst if heated.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: Warning

Hazard statements:

H229	Pressurised container: may burst if heated.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of contents / container according to local regulations.
P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.
P103	Read label before use.

2.3. Other hazards

vPvB substances contained:

Dodecametilcicloesasilossano

PBT substances contained:

Dodecametilcicloesasilossano

During cross-linking it develops ACETIC ACID (CAS 64-19-7) by hydrolysis of Triacetoxysilanes.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification 1272/2008 (CLP)**
BARIUM SULFATE		
CAS 7727-43-7	24 ≤ x < 25,5	Substance with a community workplace exposure limit.
EC 231-784-4		
INDEX -		
Reg. no. 01-2119491274-35		
(E)-1,3,3,3-Tetrafluoropropene		
CAS 29118-24-9	2 ≤ x < 2,5	Press. Gas (Comp.) H280
EC 471-480-0		
INDEX -		
Reg. no. 01-0000019758-54		
triacetoxymethylsilane		
CAS 4253-34-3	2 ≤ x < 2,5	Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318
EC 224-221-9		
INDEX -		

Reg. no. 01-2119962266-32		
triacetoxymethylsilane		
CAS 17865-07-5	2 ≤ x < 2,5	Skin Corr. 1B H314, Eye Dam. 1 H318
EC 241-816-9		
INDEX -		
Reg. no. 01-2119966899-07		
ACETIC ACID		
CAS 64-19-7	released	Flam. Liq. 3 H226, Skin Corr. 1A H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B
EC 200-580-7		
INDEX 607-002-00-6		
Dodecamethylcyclohexasiloxane		
CAS 540-97-6	0,9 ≤ x < 1	Substance PBT
EC 208-762-8		Substance vPvB
INDEX -		
Reg. no. 01-2119517435-42		

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 2,40 %

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
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT
Not suitable: water jets.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

In case of fire, development of NOx, CO.

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.
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.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. 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

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

Pressurized container - Protect against sunlight and do not expose to temperatures exceeding 50 ° C. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.
Do not store with oxidants and acid substances.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2017
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
EU	OEL EU	Directive (EU) 2017/2398; 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 2018

BARIUM SULFATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	1,5				RESP
VLA	ESP	10				
WEL	GBR	4				
GVI	HRV	10				INHAL
GVI	HRV	4				RESP
VLEP	ITA	0,5				
OEL	EU	0,5				
TLV-ACGIH		5				

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,115	mg/l
Normal value for fresh water sediment	600,4	mg/kg
Normal value of STP microorganisms	62,2	mg/l
Normal value for the terrestrial compartment	207,7	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				13000 mg/kg bw/d				
Inhalation				10 mg/m3			10 mg/m3	10 mg/m3

(E)-1,3,3,3-Tetrafluoropropene

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,1	mg/l

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				830 mg/m3				3902 mg/m3

triacetoxymethylsilane

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,02441	mg/l
Normal value in marine water	0,002441	mg/l
Normal value for fresh water sediment	0,01457	mg/kg/d
Normal value for marine water sediment	0,001457	mg/kg/d
Normal value for the terrestrial compartment	0,00336	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	3,05 mg/kg/d				
Inhalation			VND	21,06 mg/m3			VND	85,39 mg/m3
Skin			VND	6,05 mg/kg/d			VND	12,11 mg/kg/d

triacetoxymethylsilane

Predicted no-effect concentration - PNEC		
Normal value in fresh water	1	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	3,4	mg/kg/d
Normal value for marine water sediment	0,34	mg/kg/d
Normal value for water, intermittent release	10	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,145	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	1 mg/kg bw/d	VND	1 mg/kg/d				
Inhalation	5,1 mg/m3	6,3 mg/m3	5,1 mg/m3	6,3 mg/m3	31 mg/m3	25 mg/m3	31 mg/m3	25 mg/m3
Skin	VND	7,2 mg/kg bw/d	VND	7,2 mg/kg/d	VND	14,5 mg/kg bw/d	VND	14,5 mg/kg/d

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.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Wear nitrile rubber gloves (NBR - compliant with EN 754), minimum thickness of gloves 0.5 mm.

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, a mask with a type A filter combined with a type P2 filter should be worn (see standard EN 14387).
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.

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 liquid

Colour	red
Odour	Characteristic (vinegar)
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not applicable
Boiling range	Not available
Flash point	
Evaporation Rate	Not available
Flammability of solids and gases	not applicable
Lower inflammability limit	3 % (V/V)
Upper inflammability limit	16 % (V/V)
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not applicable
Vapour density	Not available
Relative density	1,22
Solubility	immiscible with water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 370 °C
Decomposition temperature	Not available
Viscosity	70000 mPas
Explosive properties	not applicable
Oxidising properties	Not available

Total solids (250°C / 482°F)	28,70 %
VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

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.

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

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

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

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:
Not classified (no significant component)

BARIUM SULFATE
LD50 (Oral) > 3000 mg/kg Mouse

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

triacetoxymethylsilane
LD50 (Oral) 1600 mg/kg Rat

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

SECTION 12. Ecological information

12.1. Toxicity

Information not available

12.2. Persistence and degradability

BARIUM SULFATE
Solubility in water 0,1 - 100 mg/l
Degradability: information not available

ACETIC ACID
Solubility in water > 10000 mg/l
Rapidly degradable

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

ACETIC ACID
Partition coefficient: soil/water 1,153

12.5. Results of PBT and vPvB assessment

vPvB substances contained:
Dodecamethylcyclohexasiloxane

PBT substances contained:
Dodecamethylcyclohexasiloxane

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

The correct disposal code (determined by the waste generation method) cannot be specified by the manufacturer in the case of products used in various sectors.

CER code (recommended): 08 04 10 - Adhesives / sealants. 16 05 04 - Gas in pressure containers (including Halon) containing dangerous substances. 15 01 04 - Metallic packaging.

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.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING

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

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA:	1950

14.2. UN proper shipping name

ADR / RID:	AEROSOLS
IMDG:	AEROSOLS
IATA:	AEROSOLS, NON-FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID:	Class: 2	Label: 2.2
IMDG:	Class: 2	Label: 2.2
IATA:	Class: 2	Label: 2.2

14.4. Packing group

ADR / RID, IMDG, IATA:	-

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (E)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Pass.:	Maximum quantity: 75 Kg	Packaging instructions: 203

Special Instructions: A98, A145, A167, A802

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: P3b

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

Product
Point 40

Substances in Candidate List (Art. 59 REACH)

Dodecamethylcyclohexasiloxane

Reg. no.: 01-2119517435-42

Substances subject to authorisation (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

Weak water pollutant - Self-classification WGK = 1.

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Aerosol 3	Aerosol, category 3
Flam. Liq. 3	Flammable liquid, category 3
Press. Gas (Comp.)	Compressed gas
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
H229	Pressurised container: may burst if heated.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may burst if heated.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

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 (EC) 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
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
- 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:
01 / 02 / 03 / 04 / 06 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.