

SILCOFLEX 450

Dated 19/01/2018

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Safety data sheet

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

1.1. Product identifier

CS0002-(06226/27) Code: Product name SILCOFLEX 450

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

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

1.3. Details of the supplier of the safety data sheet

PIGAL s.r.l. Name 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

+39 051969068 ore ufficio/office hours (8.30-13; 14-17.30) For urgent inquiries refer to

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:



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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 Triacetoxysilanes hydrolysis.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Identification

INDEX 607-002-00-6

Contains:

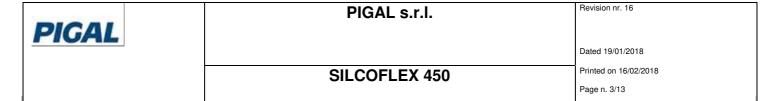
The full wording of hazard (H) phrases is given in section 16 of the sheet.

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.

Classification 1272/2008

x = Conc. %

	Distillates (petroleum), intermediate fraction		(CLP)
	hydrotreated CAS -	37,5 ≤ x < 40	Asp. Tox. 1 H304, Note N
	EC 265-148-2		
	INDEX -		
	Reg. no. 01-2119552497-29		
	Ethyl/Methyl acetoxy silane (oligomers)		
	CAS	$1,5 \le x < 2$	Skin Corr. 1B H314
	EC		
	INDEX -		
	Triacetoxyethylsilane		
	CAS 17689-77-9	$1,5 \le x < 2$	Acute Tox. 4 H302, Skin Corr.
	EC 241-677-4		1B H314, EUH014
	INDEX -		
	Reg. no. 01-2119881778-15		
	ACETIC ACID		
	CAS 64-19-7	released	Flam. Liq. 3 H226, Skin Corr. 1A H314, Note B
	EC 200-580-7		



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.

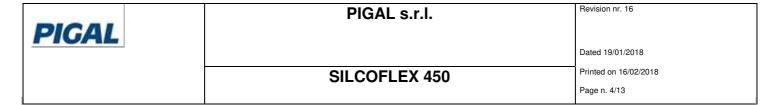
5.3. Advice for firefighters

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.



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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					
Туре	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

Protect hands with 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.



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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 a hood visor or protective visor combined with airtight 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 type 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 pungent Odour threshold Not available Not available Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point > 60 °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 mmHgVapour density Not available Relative density $0.95 \div 0.97$ insoluble in water Solubility Partition coefficient: n-octanol/water Not available Auto-ignition temperature 400 °C Not available Decomposition temperature 8000000 mPa*s Viscosity Explosive properties Not available Oxidising properties Not available

9.2. Other information

 VOC (Directive 2010/75/EC) :
 1,00 %

 VOC (volatile carbon) :
 0,40 %

 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.



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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 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.



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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 "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 available Information not available

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

Information not available Information not available

Interactive effects

Information not available Information 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 classDoes 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 classDoes 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 classDoes not meet the classification criteria for this hazard class



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GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard classDoes 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

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

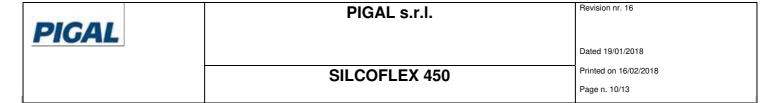
> 10000 mg/l

Rapidly biodegradable

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

12.3. Bioaccumulative potential

Bioaccumulation is unlikely.



ACETIC ACID

Partition coefficient: n-

-0,17

octanol/water

12.4. Mobility in soil

Polymeric component: insoluble in water. In the cured state is insoluble in water. Good water separation by filtration.

ACETIC ACID

Partition coefficient: 1,153

soil/water

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

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.

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.

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

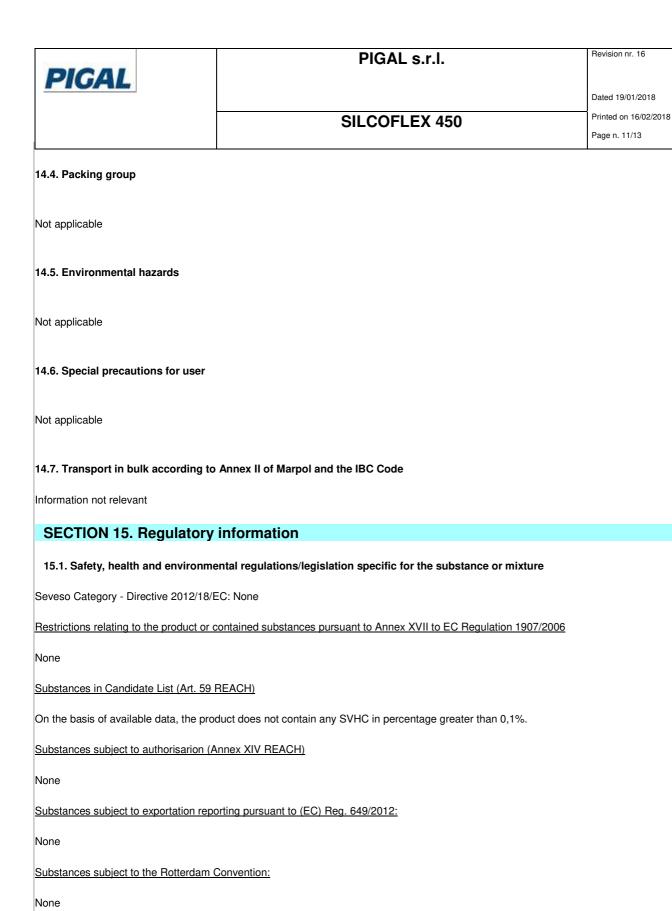
Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable



Substances subject to the Stockholm Convention:

None



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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

ENCS - Japan

DSL - Canada

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:

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



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- 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:

01 / 02 / 03 / 04 / 06 / 08 / 09 / 10 / 11 / 12 / 14 / 15.