

## 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: **SILCOSET 153**  
Product name: **SILCOSET 153**

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

Intended use: **Adhesive sealant.**

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

Name: **ACC Silicones LTD**  
Full address: **Amber House Showground Road**  
District and Country: **TA6 6A Bridgwater (Somerset)**  
**England**  
Tel. **+44(0)1278411400**  
Fax **+44(0)1278411444**e-mail address of the competent person  
responsible for the Safety Data Sheet: **info@acc-silicones.com**

#### 1.4. Emergency telephone number

For urgent inquiries refer to: **For all enquiries except Sweden and Hungary and Australia: +44(0)1278411400**  
**Sweden: Ring 112 vid inträffade förgiftningstillbud och begär giftinformation - dygnet runt.**  
**Ring 010-456-6700 i mindre brådskande fall - dygnet runt. Allmänna och förebyggande frågor om akuta förgiftningar besvaras vardagar kl 9-17.**  
**Hungary: Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ) 1097 Budapest, Nagyvárad tér 2, 06-80-201-199 (zöld szám, ingyenesen, éjjel-nappal hívható) 06-1-4761120**  
**Australia: DC Products Pty Ltd, Unit 117, 45 Gilby Road, Mount Waverley VIC 3149. Tel +61 3 9558 8898, Emergency contact number 0418529118**

### 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:  
Serious eye damage, category 1 H318 Causes serious eye damage.  
Skin irritation, category 2 H315 Causes skin irritation.

#### 2.2. Label elements

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

Hazard pictograms:



### SECTION 2. Hazards identification ... / >>

Signal words:                    Danger

Hazard statements:

**H318**                                Causes serious eye damage.  
**H315**                                Causes skin irritation.

Precautionary statements:

**P264**                                Wash . . . thoroughly after handling.  
**P280**                                Wear protective gloves / eye protection / face protection.  
**P305+P351+P338**                IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P310**                                Immediately call a POISON CENTER / doctor / . . .

**Contains:**                        METHYLSILANETRIYL-TRIACETATE  
DIACETOXYDI-TERT-BUTOXYSILANE

#### 2.3. Other hazards

vPvB substances contained:  
DODECAMETHYL CYCLOHEXASILOXANE

### SECTION 3. Composition/information on ingredients

#### 3.1. Substances

Information not relevant

#### 3.2. Mixtures

**Contains:**

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>AMORPHOUS SILICATE HYDRATE</b>		
CAS	7631-86-9    10 ≤ x < 11.5	<b>Substance with a community workplace exposure limit.</b>
EC	231-545-4	
INDEX		
Reg. no.	01-2119379499-16-0134	
<b>METHYLSILANETRIYL-TRIACETATE</b>		
CAS	4253-34-3    2.5 ≤ x < 3	<b>Skin Corr. 1B H314, Eye Dam. 1 H318, EUH014</b>
EC	224-221-9	
INDEX		
Reg. no.	21-2119987097-22	
<b>DIACETOXYDI-TERT-BUTOXYSILANE</b>		
CAS	13170-23-5    1.5 ≤ x < 2	<b>Skin Corr. 1B H314, Eye Dam. 1 H318</b>
EC	236-112-3	
INDEX		
Reg. no.	01-2119987098-20	
<b>DODECAMETHYL CYCLOHEXASILOXANE</b>		
CAS	540-97-6    0.2 ≤ x < 0.5 <small>Substance vPvB</small>	
EC	208-762-8	
INDEX		
Reg. no.	01-2119517435-42	
<b>ACETIC ACID</b>		
CAS	64-19-7    0 ≤ x < 0.1	<b>Flam. Liq. 3 H226, Skin Corr. 1A H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B</b>
EC	200-580-7	
INDEX	607-002-00-6	
Reg. no.	01-2119475328-30	
<b>OCTAMETHYLTETRACYCLOSILOXANE</b>		
CAS	556-67-2    0 ≤ x < 0.1	<b>Flam. Liq. 3 H226, Repr. 2 H361f, Aquatic Chronic 2 H411</b>
EC	209-136-7	
INDEX		
Reg. no.	01-2119529238-36	

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

## 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

None in particular.

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

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

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.

### 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. 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:

CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2017
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveystieteiden tutkimuskeskus julkaisu 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 7 czerwca 2017 r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República I 26; 2012-02-06
ROU	România	Monitorul Oficial al României 44; 2012-01-19
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
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 2017

### AMORPHOUS SILICATE HYDRATE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	4				INHAL
MAK	DEU	4				INHAL
WEL	GBR	6				INHAL
WEL	GBR	2.4				RESP
OEL	EU	6				INHAL
OEL	EU	2.4				RESP

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					4 mg/m3	VND	4 mg/m3	VND

### SECTION 8. Exposure controls/personal protection ... / >>

#### METHYLSILANETRIYL-TRIACETATE

##### 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
Normal value for marine water sediment	0.34	mg/kg
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

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	1				
				mg/kg bw/d				
Inhalation			5.1	6.3			31	25
			mg/m3	mg/m3			mg/kg	mg/m3
Skin			VND	7.2			VND	14.5
				mg/kg/d				mg/kg bw/d

#### DIACETOXYDI-TERT-BUTOXSILANE

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0.02875	mg/l
Normal value in marine water	0.02875	mg/l
Normal value for fresh water sediment	0.03279	mg/kg/d
Normal value for marine water sediment	0.00327	mg/kg/d
Normal value of STP microorganisms	9	
Normal value of STP microorganisms	13.276	mg/l

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	10.69				
				mg/kg bw/d				
Inhalation			VND	37.2			VND	150.84
				mg/m3				mg/m3
Skin			VND	10.69			VND	21.39
				mg/kg bw/d				mg/kg bw/d

#### DODECAMETHYL CYCLOHEXASILOXANE

##### Predicted no-effect concentration - PNEC

Normal value for fresh water sediment	2.826	mg/kg
Normal value for marine water sediment	0.282	mg/kg
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	3.336	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1.7				
				mg/kg bw/d				
Inhalation			0.3	2.7			1.22	11
			mg/m3	mg/m3			mg/m3	mg/m3

### SECTION 8. Exposure controls/personal protection ... / >>

#### ACETIC ACID

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV	CZE	25		35	
AGW	DEU	25	10	50	20
MAK	DEU	25	10	50	20
TLV	DNK	25	10		
VLA	ESP	25	10	37	15
HTP	FIN	13	5	25	10
VLEP	FRA			25	10
AK	HUN	25		25	
MAC	NLD		10		
TLV	NOR	25	10		
NDS	POL	25		50	
VLE	PRT	25	10		
TLV	ROU	25	10		
NPHV	SVK	25	10		
MAK	SWE	13	5	25	10
OEL	EU	25	10	50	20
TLV-ACGIH		25	10	37	15

#### OCTAMETHYLTETRACYCLOSILOXANE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU		10		RESP

##### Predicted no-effect concentration - PNEC

Normal value in marine water	0.044	mg/l
Normal value for fresh water sediment	0.128	mg/kg
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0.16	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute		Chronic		Acute		Chronic	
	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation	61	305	61	305				
	mg/m3	mg/m3	mg/m3	mg/m3				

##### Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.  
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

### 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 category III work gloves (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 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 A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard 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

## SECTION 8. Exposure controls/personal protection ... / >>

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	paste
Colour	colourless
Odour	pungent
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	Not available
Solubility	immiscible with water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 400 °C
Decomposition temperature	Not available
Viscosity	paste
Explosive properties	Not available
Oxidising properties	Not available

### 9.2. Other information

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

Information not available

### 10.2. Chemical stability

Information not available

### 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, potassium 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.

**SECTION 10. Stability and reactivity ... / >>**

**10.5. Incompatible materials**

ACETIC ACID

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

**10.6. Hazardous decomposition products**

Information not available

**SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Oral LD50 (Rat) >5000 mg/kg; Dermal LD50 (Rabbit) >2000 mg/kg.

**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:	Not classified (no significant component)
LD50 (Dermal) of the mixture:	Not classified (no significant component)

<b>AMORPHOUS SILICATE HYDRATE</b>	
LD50 (Oral)	> 2000 mg/kg Rat
LD50 (Dermal)	> 2000 mg/kg Rat
LC50 (Inhalation)	> 2.2 mg/l/1h Rat

<b>ACETIC ACID</b>	
LD50 (Oral)	3310 mg/kg Rat
LD50 (Dermal)	1060 mg/kg Rabbit
LC50 (Inhalation)	11.4 mg/l/4h Rat

<b>OCTAMETHYLTETRACYCLOSILOXANE</b>	
LC50 (Inhalation)	2975 ppm/4h

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY



**SECTION 11. Toxicological information ... / >>**

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**

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

**12.1. Toxicity**

DIACETOXYDI-TERT-BUTOXYSILANE	
LC50 - for Fish	192.34 mg/l/96h
EC50 - for Algae / Aquatic Plants	28.75 mg/l/72h

**12.2. Persistence and degradability**

DIACETOXYDI-TERT-BUTOXYSILANE	
Rapidly degradable	79.5% Method: OECD 301 F, Exposure duration: 28 days

AMORPHOUS SILICATE HYDRATE	
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**

AMORPHOUS SILICATE HYDRATE	
Partition coefficient: n-octanol/water	0.53

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:  
DODECAMETHYL CYCLOHEXASILOXANE



**SECTION 15. Regulatory information ... / >>**

Point	3	
<u>Contained substance</u>		
Point	70	OCTAMETHYLTETRACYCLOSILOXANE Reg. no.: 01-2119529238-36

Substances in Candidate List (Art. 59 REACH)

DODECAMETHYL CYCLOHEXASILOXANE

Reg. no.: 01-2119517435-42

OCTAMETHYLTETRACYCLOSILOXANE

Reg. no.: 01-2119529238-36

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

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**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:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H226</b>	Flammable liquid and vapour.
<b>H361f</b>	Suspected of damaging fertility.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH014</b>	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

**SECTION 16. Other information ... / >>**

- 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.