Safety Data Sheet according to Regulation (EC) No 1907/2006

sds no. : 317263
V003.2

LOCTITE SI 5980 known as Loctite SI 5980 100 ML EDFN

Revision: 21.10.2013
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
LOCTITE SI 5980 known as Loctite SI 5980 100 ML EDFN

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
Silicone sealant

1.3. Details of the supplier of the safety data sheet
Henkel Limited
Wood Lane End
HP2 4RQ Hemel Hempstead, Herts

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number
24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):
Skin irritation Category 2
H315 Causes skin irritation.
Serious eye irritation Category 2
H319 Causes serious eye irritation.

Classification (DPD):
The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Signal word: Warning

Hazard statement: H315 Causes skin irritation.
H319 Causes serious eye irritation.

Supplemental information Contains 3-Aminopropyltriethoxysilane. May produce an allergic reaction.

Precautionary statement: P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P337+P313 If eye irritation persists: Get medical advice/attention.

Label elements (DPD):
The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

Additional labeling:
Safety data sheet available for professional user on request.

Contains 3-Aminopropyltriethoxysilane. May produce an allergic reaction.

2.3. Other hazards
None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:
Silicone sealant

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hexamethyldisilizane 999-97-3	213-668-5	>= 1- < 3 %	Flammable liquids 2 H225 Acute toxicity 4; Oral H302 Acute toxicity 3; Dermal H311 Skin corrosion 1B H314 Acute toxicity 4; Inhalation H332 Chronic hazards to the aquatic environment 3 H412
Trimethoxyvinylsilane 2768-02-7	220-449-8 01-2119513215-52	>= 1- < 3 %	Flammable liquids 3 H226 Acute toxicity 4; Inhalation H332
3-Aminopropyltriethoxysilane 919-30-2	213-048-4 01-2119480479-24	>= 0,1- < 1 %	Skin sensitizer 1 H317 Skin corrosion 1B H314 Acute toxicity 4; Oral H302

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hexamethyldisilizane 999-97-3	213-668-5	>= 1 - < 3 %	F - Highly flammable; R11 C - Corrosive; R34 Xn - Harmful; R20/21/22 R52/53
Trimethoxyvinylsilane 2768-02-7	220-449-8 01-2119513215-52	>= 1 - < 3 %	R10 Xn - Harmful; R20
3-Aminopropyltriethoxysilane 919-30-2	213-048-4 01-2119480479-24	>= 0,1 - < 1 %	Xi - Irritant; R43 C - Corrosive; R34 Xn - Harmful; R22

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

4.3. Indication of any immediate medical attention and special treatment needed
See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:
High pressure waterjet

5.2. Special hazards arising from the substance or mixture
In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

5.3. Advice for firefighters
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:
In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid skin and eye contact.

6.2. Environmental precautions
Do not let product enter drains.

6.3. Methods and material for containment and cleaning up
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections
See advice in chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Use only in well-ventilated areas.
Avoid skin and eye contact.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Hygiene measures:
Good industrial hygiene practices should be observed.
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities
Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

7.3. Specific end use(s)
Silicone sealant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient	ppm	mg/m^3	Type	Category	Remarks
CALCIUM CARBONATE, INHALABLE DUST 1317-65-3		10	Time Weighted Average (TWA):		EH40 WEL
MARBLE, RESPIRABLE LIMESTONE, RESPIRABLE 1317-65-3		4	Time Weighted Average (TWA):		EH40 WEL
MARBLE, TOTAL INHALABLE LIMESTONE, TOTAL INHALABLE 1317-65-3		10	Time Weighted Average (TWA):		EH40 WEL
CALCIUM CARBONATE, RESPIRABLE DUST 1317-65-3		4	Time Weighted Average (TWA):		EH40 WEL
CALCIUM CARBONATE, INHALABLE DUST 471-34-1		10	Time Weighted Average (TWA):		EH40 WEL
CALCIUM CARBONATE, RESPIRABLE DUST 471-34-1		4	Time Weighted Average (TWA):		EH40 WEL
LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE 471-34-1		4	Time Weighted Average (TWA):		EH40 WEL
LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE 471-34-1		10	Time Weighted Average (TWA):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Trimethoxyvinylsilane 2768-02-7	aqua (freshwater)					0,34 mg/L	
Trimethoxyvinylsilane 2768-02-7	aqua (marine water)					0,034 mg/L	
Trimethoxyvinylsilane 2768-02-7	aqua (intermittent releases)					3,4 mg/L	
Trimethoxyvinylsilane 2768-02-7	STP					110 mg/L	
Trimethoxyvinylsilane 2768-02-7	sediment (freshwater)				0,27 mg/kg		
Trimethoxyvinylsilane 2768-02-7	sediment (marine water)				0,12 mg/kg		
Trimethoxyvinylsilane 2768-02-7	soil				0,046 mg/kg		
3-Aminopropyltriethoxysilane 919-30-2	aqua (freshwater)					0,33 mg/L	
3-Aminopropyltriethoxysilane 919-30-2	aqua (marine water)					0,033 mg/L	
3-Aminopropyltriethoxysilane 919-30-2	aqua (intermittent releases)					3,3 mg/L	
3-Aminopropyltriethoxysilane 919-30-2	soil				0,05 mg/kg		
3-Aminopropyltriethoxysilane 919-30-2	STP					13 mg/L	
3-Aminopropyltriethoxysilane 919-30-2	sediment (freshwater)				1,2 mg/kg		
3-Aminopropyltriethoxysilane 919-30-2	sediment (marine water)				0,12 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Trimethoxyvinylsilane 2768-02-7	worker	Dermal	Long term exposure - systemic effects		0,69 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	worker	inhalation	Long term exposure - systemic effects		4,9 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	Dermal	Acute/short term exposure - systemic effects		26,9 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	general population	inhalation	Acute/short term exposure - systemic effects		93,4 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	Dermal	Long term exposure - systemic effects		0,3 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	general population	inhalation	Long term exposure - systemic effects		1,04 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	oral	Long term exposure - systemic effects		0,3 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	worker	Dermal	Acute/short term exposure - systemic effects		0,69 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	worker	inhalation	Acute/short term exposure - systemic effects		4,9 mg/m3	
3-Aminopropyltriethoxysilane 919-30-2	worker	Dermal	Acute/short term exposure - systemic effects		8,3 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	worker	inhalation	Acute/short term exposure - systemic effects		59 mg/m3	
3-Aminopropyltriethoxysilane 919-30-2	worker	Dermal	Long term exposure - systemic effects		8,3 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	worker	inhalation	Long term exposure - systemic effects		59 mg/m3	
3-Aminopropyltriethoxysilane 919-30-2	general population	oral	Acute/short term exposure - systemic effects		5 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	general population	Dermal	Acute/short term exposure - systemic effects		5 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	general population	inhalation	Acute/short term exposure - systemic effects		17,4 mg/m3	
3-Aminopropyltriethoxysilane 919-30-2	general population	oral	Long term exposure - systemic effects		5 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	general population	Dermal	Long term exposure - systemic effects		5 mg/kg bw/day	
3-Aminopropyltriethoxysilane 919-30-2	general population	inhalation	Long term exposure - systemic effects		17 mg/m3	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A

Hand protection:
Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Wear protective glasses.

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste black
Odor	alcohol-like
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	> 100,00 °C (> 212 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density ()	1,3200 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
None if used for intended purpose.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
Stable under normal conditions of storage and use.

10.5. Incompatible materials
None if used properly.

10.6. Hazardous decomposition products
carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:
This material is considered to have low toxicity if swallowed.

Inhalative toxicity:
Inhalation of vapors in high concentration may cause irritation of respiratory system

Skin irritation:
Causes skin irritation.
May produce an allergic reaction.

Eye irritation:
Causes serious eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
3-Aminopropyltriethoxysilane 919-30-2	LD50	1.570 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Hexamethyldisilizane 999-97-3	LC50	1516 ppm	inhalation	6 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Hexamethyldisilizane 999-97-3	Acute toxicity estimate (ATE)	10,1 mg/l				Expert judgement

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
3-Aminopropyltriethoxysilane 919-30-2	LD50	4.290 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
3-Aminopropyltriethoxysilane 919-30-2	corrosive	4 h	rabbit	

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
3-Aminopropyltriethoxysilane 919-30-2	highly irritating		rabbit	

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
3-Aminopropyltriethoxysilane 919-30-2	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Hexamethyldisilizane 999-97-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Ecotoxicity:

Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Hexamethyldisilizane 999-97-3	LC50	88 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hexamethyldisilizane 999-97-3	EC50	80 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hexamethyldisilizane 999-97-3	EC50	19 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	2,7 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethoxyvinylsilane 2768-02-7	LC50	191 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trimethoxyvinylsilane 2768-02-7	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Trimethoxyvinylsilane 2768-02-7	EC50	> 100 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
3-Aminopropyltriethoxysilane 919-30-2	LC50	>= 934 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
3-Aminopropyltriethoxysilane 919-30-2	EC50	331 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3-Aminopropyltriethoxysilane 919-30-2	NOEC	1,3 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	603 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:
The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hexamethyldisilizane 999-97-3		no data	15,3 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
3-Aminopropyltriethoxysilane 919-30-2		aerobic	67 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:
Cured adhesives are immobile.

Bioaccumulative potential:
No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB

Trimethoxyvinylsilane 2768-02-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
3-Aminopropyltriethoxysilane 919-30-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.
Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.
Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.4. Packaging group

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content < 5 %
(1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text
of all abbreviations indicated by codes in this safety data sheet are as follows:

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R22 Harmful if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.