



Henkel Ltd · Wood Lane End · HP2 4RQ Hemel Hempstead

Roadcrew Solutions

Volvo Parts Corp, Swift Park
CV21 1DZ Rugby
United Kingdom

Customer Number: 488297

Date: 13.09.2019

Ladies and Gentlemen,

We are sending you the current safety data sheets for the articles listed below which are subject to the labelling provisions.

According to Regulation (EC) 1907/2006 of the European Community a safety data sheet has to be provided for preparations classified as dangerous

- with the first delivery of the articles, and
- after each serious alteration within the last 12 months.

If you resell the products (e.g. as wholesaler) you are also obliged to inform your customers in the same manner.

Please note that, with immediate effect, exposure scenarios, for substances for which we have prepared a chemical safety assessment, can be downloaded under mysds.henkel.com. The direct link, if applicable, can be found at the end of the safety data sheet.

Please issue these sheets to all persons in your company who are responsible for industrial safety, health protection and for handling these products.

Herewith all previous versions of the safety data sheets are no longer valid.

Best regards

<u>Article No.</u>	<u>Name</u>	<u>SDB Number</u>	<u>Lg</u>
2063268	LOCTITE SI 5366 CL CR310ML EGF	164436V09.00	E



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

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LOCTITE SI 5366 CL CR310ML EGF

SDS No. : 164436

V009.0

Revision: 12.09.2019

printing date: 13.09.2019

Replaces version from: 18.02.2019

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

1.1. Product identifier

LOCTITE SI 5366 CL CR310ML EGF

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 Ltd
Adhesives
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

Fax-no.: +44 (1442) 278071

ua-productsafety.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.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word:

Warning

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

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

2.3. Other hazards

None if used properly.

Evolves acetic acid during cure.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:
Acetoxy curing silicone

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Octamethylcyclotetrasiloxane 556-67-2	209-136-7 01-2119529238-36	1- < 3 %	Flam. Liq. 3 H226 Repr. 2 H361F Aquatic Chronic 4 H413 EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)
Methyltriacetoxysilane 4253-34-3	224-221-9 01-2119962266-32 01-2119987097-22	1- < 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1C H314 Eye Dam. 1 H318
Decamethylcyclopentasiloxane 541-02-6	208-764-9 01-2119511367-43	0,1- < 1 %	Aquatic Chronic 4 H413 EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)
Dodecamethylcyclohexasiloxane 540-97-6	208-762-8 01-2119517435-42	0,1- < 1 %	Aquatic Chronic 4 H413 EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)

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.

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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

Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

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 (NO_x) can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

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 contact with skin and eyes.

Ensure adequate ventilation.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Scrape up as much material as possible.

Ensure adequate ventilation.

Store in a partly filled, closed container until disposal.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid skin and eye contact.

Vapours should be extracted to avoid inhalation.

Ensure that workrooms are adequately ventilated.

See advice in section 8

Hygiene measures:

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

7.2. Conditions for safe storage, including any incompatibilities

- Store in a cool, well-ventilated place.
- Refer to Technical Data Sheet
- Never allow product to get in contact with water during storage

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 [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Acetic acid 64-19-7 [ACETIC ACID]	10	25	Time Weighted Average (TWA):	Indicative	ECTLV
Acetic acid 64-19-7 [ACETIC ACID]	20	50	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Acetic acid 64-19-7 [ACETIC ACID]	20	50	Short Term Exposure Limit (STEL):		EH40 WEL
Acetic acid 64-19-7 [ACETIC ACID]	10	25	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure LimitsValid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Acetic acid 64-19-7 [ACETIC ACID]	10	25	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Acetic acid 64-19-7 [ACETIC ACID]	10	25	Time Weighted Average (TWA):	Indicative	ECTLV
Acetic acid 64-19-7 [ACETIC ACID]	20	50	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Acetic acid 64-19-7 [ACETIC ACID]	20	50	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Octamethylcyclotetrasiloxane 556-67-2	aqua (freshwater)		0,0015 mg/l				
Octamethylcyclotetrasiloxane 556-67-2	aqua (marine water)		0,00015 mg/l				
Octamethylcyclotetrasiloxane 556-67-2	sewage treatment plant (STP)		10 mg/l				
Octamethylcyclotetrasiloxane 556-67-2	sediment (freshwater)				3 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	sediment (marine water)				0,3 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	oral				41 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	Soil				0,54 mg/kg		
Methylsilanetriyl triacetate 4253-34-3	aqua (freshwater)		1,0 mg/l				
Methylsilanetriyl triacetate 4253-34-3	aqua (marine water)		0,1 mg/l				
Methylsilanetriyl triacetate 4253-34-3	aqua (intermittent releases)		10 mg/l				
Methylsilanetriyl triacetate 4253-34-3	sediment (freshwater)				0,80 mg/kg		
Methylsilanetriyl triacetate 4253-34-3	sediment (marine water)				0,08 mg/kg		
Methylsilanetriyl triacetate 4253-34-3	Soil				0,13 mg/kg		
Methylsilanetriyl triacetate 4253-34-3	sewage treatment plant (STP)		> 10 mg/l				
Decamethylcyclopentasiloxane 541-02-6	aqua (freshwater)		0,0012 mg/l				
Decamethylcyclopentasiloxane 541-02-6	aqua (marine water)		0,00012 mg/l				
Decamethylcyclopentasiloxane 541-02-6	sewage treatment plant (STP)		10 mg/l				
Decamethylcyclopentasiloxane 541-02-6	sediment (freshwater)				11 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	Soil				1,27 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	oral				16 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	sediment (marine water)				1,1 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	sewage treatment plant (STP)		1 mg/l				
Dodecamethylcyclohexasiloxane 540-97-6	sediment (freshwater)				13 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	Soil				3,77 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	oral				66,7 mg/kg		
Dodecamethylcyclohexasiloxane 540-97-6	sediment (marine water)				1,3 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long term exposure - systemic effects		73 mg/m ³	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long term exposure - local effects		73 mg/m ³	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - systemic effects		13 mg/m ³	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - local effects		13 mg/m ³	
Octamethylcyclotetrasiloxane 556-67-2	General population	oral	Long term exposure - systemic effects		3,7 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	Workers	inhalation	Long term exposure - systemic effects		25 mg/m ³	
Methylsilanetriyl triacetate 4253-34-3	Workers	inhalation	Acute/short term exposure - systemic effects		25 mg/m ³	
Methylsilanetriyl triacetate 4253-34-3	Workers	dermal	Long term exposure - systemic effects		14,5 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	Workers	dermal	Acute/short term exposure - systemic effects		14,5 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	General population	inhalation	Long term exposure - local effects		5,1 mg/m ³	
Methylsilanetriyl triacetate 4253-34-3	General population	inhalation	Acute/short term exposure - local effects		5,1 mg/m ³	
Methylsilanetriyl triacetate 4253-34-3	General population	dermal	Long term exposure - systemic effects		7,2 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	General population	dermal	Acute/short term exposure - systemic effects		7,2 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	General population	oral	Long term exposure - systemic effects		1 mg/kg	
Methylsilanetriyl triacetate 4253-34-3	General population	oral	Acute/short term exposure - systemic effects		1 mg/kg	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Acute/short term exposure - systemic effects		97,3 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Acute/short term exposure - local effects		24,2 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - systemic effects		97,3 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - local effects		24,2 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Acute/short term exposure - systemic effects		17,3 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Acute/short term exposure - local effects		4,3 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	General population	oral	Long term exposure - systemic effects		5 mg/kg	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Long term exposure - systemic effects		17,3 mg/m ³	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Long term exposure - local effects		4,3 mg/m ³	

			effects		
Decamethylcyclopentasiloxane 541-02-6	General population	oral	Acute/short term exposure - systemic effects		5 mg/kg
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Long term exposure - systemic effects		11 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Long term exposure - local effects		1,22 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	Workers	inhalation	Acute/short term exposure - local effects		6,1 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Long term exposure - systemic effects		2,7 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Long term exposure - local effects		0,3 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	General population	inhalation	Acute/short term exposure - local effects		1,5 mg/m3
Dodecamethylcyclohexasiloxane 540-97-6	General population	oral	Long term exposure - systemic effects		1,7 mg/kg
Dodecamethylcyclohexasiloxane 540-97-6	General population	oral	Acute/short term exposure - systemic effects		1,7 mg/kg

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 (EN 14387)

This recommendation should be matched to local conditions.

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; \geq 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; \geq 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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste Clear
Odor	Acetic acid
Odour threshold	No data available / Not applicable
pH	Not applicable
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	Not determined
Evaporation rate	> 150 °C (> 302 °F)
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Relative vapour density:	< 0,1 mm hg
Density	No data available / Not applicable
0	1,04 g/cm3
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Partially soluble
Solubility (qualitative) (Solvent: Acetone)	Insoluble
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	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
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong oxidizing agents.
Polymerises in presence of water.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if used according to specifications.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

Evolves acetic acid during cure.
At higher temperatures (>150C) may release formaldehyde (traces).

SECTION 11: Toxicological information

General toxicological information:

Acetic acid is liberated slowly upon contact with moisture.

Acetic acid released during polymerisation of acetoxy curing RTV silicones is irritating to the eyes

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	LD50	> 4.800 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Methyltriacetoxysilane 4253-34-3	LD50	1.600 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Decamethylcyclopentasiloxane 541-02-6	LD50	> 5.000 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Dodecamethylcyclohexasiloxane 540-97-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	LD50	> 2.375 mg/kg	rat	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Decamethylcyclopentasiloxane 541-02-6	LD50	> 2.000 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Dodecamethylcyclohexasiloxane 540-97-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	LC50	36 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Decamethylcyclopentasiloxane 541-02-6	LC50	8,67 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	not irritating		rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Methyltriacetoxysilane 4253-34-3	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Decamethylcyclopentasiloxane 541-02-6	not irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Dodecamethylcyclohexasiloxane 540-97-6	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Methyltriacetoxysilane 4253-34-3	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Decamethylcyclopentasiloxane 541-02-6	not irritating	24 h	rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Dodecamethylcyclohexasiloxane 540-97-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Methyltriacetoxysilane 4253-34-3	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Decamethylcyclopentasiloxane 541-02-6	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Dodecamethylcyclohexasiloxane 540-97-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	negative	bacterial gene mutation assay	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Octamethylcyclotetrasiloxane 556-67-2	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Octamethylcyclotetrasiloxane 556-67-2	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Methyltriacetoxysilane 4253-34-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Methyltriacetoxysilane 4253-34-3	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Methyltriacetoxysilane 4253-34-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Decamethylcyclopentasiloxane 541-02-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Decamethylcyclopentasiloxane 541-02-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Decamethylcyclopentasiloxane 541-02-6	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Dodecamethylcyclohexasiloxane 540-97-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Dodecamethylcyclohexasiloxane 540-97-6	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Octamethylcyclotetrasiloxane 556-67-2	negative	inhalation		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Octamethylcyclotetrasiloxane 556-67-2	negative	oral; gavage		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Decamethylcyclopentasiloxane 541-02-6	negative	inhalation		rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)
Decamethylcyclopentasiloxane 541-02-6	negative	inhalation: vapour		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Dodecamethylcyclohexasiloxane 540-97-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	NOAEL P 300 ppm NOAEL F1 300 ppm	two-generation study	inhalation	rat	equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
Methyltriacetoxysilane 4253-34-3	NOAEL P \geq 1.000 mg/kg NOAEL F1 \geq 1.000 mg/kg	screening	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Decamethylcyclopentasiloxane 541-02-6	NOAEL P \geq 160 ppm NOAEL F1 \geq 160 ppm NOAEL F2 \geq 160 ppm	two-generation study	inhalation: vapour	rat	EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
Dodecamethylcyclohexasiloxane 540-97-6	NOAEL P 1.000 mg/kg NOAEL F1 1.000 mg/kg	screening	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	LOAEL 35 ppm	inhalation	6 h nose only inhalation 5 days/week for 13 weeks	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
Octamethylcyclotetrasiloxane 556-67-2	NOAEL 960 mg/kg	dermal	3 w 5 d/w	rabbit	equivalent or similar to OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Methyltriacetoxysilane 4253-34-3	NOAEL 50 mg/kg	oral: gavage	28-51 d daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Decamethylcyclopentasiloxane 541-02-6	NOAEL \geq 1.000 mg/kg	oral: gavage	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Dodecamethylcyclohexasiloxane 540-97-6	NOAEL 1.000 mg/kg	oral: gavage	29 d daily, 7 d/w	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard:

No data available.

SECTION 12: Ecological information**General ecological information:**

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

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered.

12.1. Toxicity**Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	NOEC	0,0044 mg/l	93 d	Salmo gairdneri (new name: Oncorhynchus mykiss)	other guideline:
Octamethylcyclotetrasiloxane 556-67-2	LC50		96 h	Oncorhynchus mykiss	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Methyltriacetoxysilane 4253-34-3	LC50	> 110 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Decamethylcyclopentasiloxane 541-02-6	LC50		96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Decamethylcyclopentasiloxane 541-02-6	NOEC		90 d	Oncorhynchus mykiss	OECD Guideline 210 (fish early life stage toxicity test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	EC50		48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic invertebrate Acute Toxicity Test, Freshwater Daphnids)
Decamethylcyclopentasiloxane 541-02-6	EC50		48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	NOEC	7.9 µg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)
Decamethylcyclopentasiloxane 541-02-6	NOEC		21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Dodecamethylcyclohexasiloxane 540-97-6	NOEC			Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	EC50		96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
Octamethylcyclotetrasiloxane 556-67-2	NOEC	< 0,022 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
Decamethylcyclopentasiloxane 541-02-6	NOEC		96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Decamethylcyclopentasiloxane 541-02-6	EC50		96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dodecamethylcyclohexasiloxane 540-97-6	NOEC			Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dodecamethylcyclohexasiloxane 540-97-6	EC50			Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	EC50		3 h	activated sludge	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
Decamethylcyclopentasiloxane 541-02-6	EC0	> 10.000 mg/l	30 min	Pseudomonas putida	DIN 38412, part 27 (Bacterial oxygen consumption test)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Octamethylcyclotetrasiloxane 556-67-2	not readily biodegradable.	aerobic	3,7 %	29 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Decamethylcyclopentasiloxane 541-02-6	not readily biodegradable.	aerobic	0,14 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Dodecamethylcyclohexasiloxane 540-97-6	not readily biodegradable.	aerobic	4,47 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)

12.3. Bioaccumulative potential

Does not bioaccumulate.

Hazardous substances CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
Octamethylcyclotetrasiloxane 556-67-2	12.400	28 d		Pimephales promelas	EPA OTS 797.1520 (Fish Bioconcentration Test-Rainbow Trout)
Decamethylcyclopentasiloxane 541-02-6	7.060	35 d		Pimephales promelas	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Dodecamethylcyclohexasiloxane 540-97-6	1.160	49 d		Pimephales promelas	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Octamethylcyclotetrasiloxane 556-67-2	6,488	25,1 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-Stirring Method)
Decamethylcyclopentasiloxane 541-02-6	8,023	25,3 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-Stirring Method)
Dodecamethylcyclohexasiloxane 540-97-6	8,87	23,6 °C	not specified

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Octamethylcyclotetrasiloxane 556-67-2	Fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Methyltriacetoxysilane 4253-34-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Decamethylcyclopentasiloxane 541-02-6	very Persistent and very Bioaccumulative (vPvB)
Dodecamethylcyclohexasiloxane 540-97-6	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.

Collection and delivery to recycling enterprise or other registered elimination institution.

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

- 14.1. **UN number**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.2. **UN proper shipping name**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.3. **Transport hazard class(es)**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.4. **Packing group**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.5. **Environmental hazards**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.6. **Special precautions for user**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.7. **Transport in bulk according to Annex II of Marpol 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 < 3 %
(2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.