

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

Page 1 of 19

SDS No.: 164824 V006.0

Revision: 28.05.2019

printing date: 19.11.2020

Replaces version from: 09.04.2019

LOCTITE SI 5368 BK CR310ML EGF

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

1.1. Product identifier

LOCTITE SI 5368 BK CR310ML EGF

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

Intended use: Silicone sealant

${f 1.3.}$ Details of the supplier of the safety data sheet

Henkel Ltd 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 damage Category 1

H318 Causes serious eye damage.

2.2. Label elements

Label elements (CLP):



Contains Acetic acid

Methyltriacetoxysilane

Signal word: Danger

Hazard statement:	H318 Causes serious eye damage. H315 Causes skin irritation.
Precautionary statement: Prevention	P280 Wear eye protection/face protection.
Precautionary statement: Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water.

2.3. Other hazards

None if used properly.

This mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

Evolves acetic acid during cure.

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)
Acetic acid 64-19-7	200-580-7 01-2119475328-30	1-< 3%	Flam. Liq. 3 H226 Skin Corr. 1A H314 Met. Corr. 1 H290
Methyltriacetoxysilane 4253-34-3	224-221-9 01-2119962266-32 01-2119987097-22	1-< 3 %	Acute Tox. 4; Oral H302 Skin Corr. 1C H314
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.

Eve 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.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

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:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

Do not expose to direct heat.

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

carbon oxides.

Silica fume

Formaldehyde

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 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

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.

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

See advice in section 8

Ensure that workrooms are adequately ventilated.

Avoid skin and eye contact.

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 Limits

Valid 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	Exposure period	Value	Remarks				
	Compartment		mg/l	ppm	mg/kg	others	
Octamethylcyclotetrasiloxane	aqua		0,0015				
556-67-2	(freshwater)		mg/l				
Octamethylcyclotetrasiloxane	aqua (marine		0,00015				
556-67-2	water)		mg/l				
Octamethylcyclotetrasiloxane	sewage		10 mg/l				
556-67-2	treatment plant (STP)						
Octamethylcyclotetrasiloxane	sediment				3 mg/kg		
556-67-2	(freshwater)						
Octamethylcyclotetrasiloxane	sediment				0,3 mg/kg		
556-67-2	(marine water)						
Octamethylcyclotetrasiloxane 556-67-2	oral				41 mg/kg		
Octamethylcyclotetrasiloxane 556-67-2	Soil				0,54 mg/kg		
Acetic acid	aqua		3,058 mg/l				
64-19-7	(freshwater)						
Acetic acid	aqua (marine		0,3058				
64-19-7	water)		mg/l	<u> </u>			
Acetic acid	aqua		30,58 mg/l				
64-19-7	(intermittent releases)						
Acetic acid	sewage		85 mg/l				
64-19-7	treatment plant (STP)						
Acetic acid	sediment				11,36		
64-19-7	(freshwater)				mg/kg		
Acetic acid	sediment				1,136		
64-19-7	(marine water)				mg/kg		
Acetic acid	Soil				0,478		
64-19-7					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	aqua		10 mg/l				
4253-34-3	(intermittent releases)						
Methylsilanetriyl triacetate	sediment				0,80 mg/kg		
4253-34-3	(freshwater)						
Methylsilanetriyl triacetate	sediment				0,08 mg/kg		
4253-34-3	(marine water)				0.12 //		
Methylsilanetriyl triacetate 4253-34-3	Soil				0,13 mg/kg		
Methylsilanetriyl triacetate	sewage		> 10 mg/l]	
4253-34-3	treatment plant (STP)						
Decamethylcyclopentasiloxane	aqua		> 0,0012				
541-02-6 Decamethylcyclopentasiloxane	(freshwater) aqua (marine	1	mg/l > 0,00012			-	
541-02-6	water)		mg/l				
Decamethylcyclopentasiloxane	sewage		10 mg/l				
541-02-6	treatment plant						
	(STP)		1				
Decamethylcyclopentasiloxane 541-02-6	sediment (freshwater)				11 mg/kg		
Decamethylcyclopentasiloxane 541-02-6	Soil				1,27 mg/kg		
Decamethylcyclopentasiloxane	oral				16 mg/kg		
541-02-6				<u> </u>		<u> </u>	
Decamethylcyclopentasiloxane 541-02-6	sediment (marine water)				1,1 mg/kg		
Dodecamethylcyclohexasiloxane	sediment			Ì	2,826		1
540-97-6	(freshwater)		1		mg/kg		
Dodecamethylcyclohexasiloxane	sediment				0,282		
540-97-6	(marine water)	<u>L</u>	<u> </u>	<u></u>	mg/kg	<u> </u>	
Dodecamethylcyclohexasiloxane	Soil				3,336		
540-97-6					mg/kg		
Dodecamethylcyclohexasiloxane	sewage		> 1 mg/l				

SDS No.: 164824 V006.0 LOCTITE SI 5368 BK CR310ML EGF Page 6 of 19

540-97-6	treatment plant			
	(STP)			

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 -		73 mg/m3	
			systemic effects			
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long term exposure - local effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Acute/short term exposure - systemic effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Acute/short term exposure - local effects		73 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - systemic effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Long term exposure - local effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Acute/short term exposure - systemic effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	inhalation	Acute/short term exposure - local effects		13 mg/m3	
Octamethylcyclotetrasiloxane 556-67-2	General population	oral	Long term exposure - systemic effects		3,7 mg/kg	
Octamethylcyclotetrasiloxane 556-67-2	General population	oral	Acute/short term exposure - systemic effects		3,7 mg/kg	
Acetic acid 64-19-7	Workers	inhalation	Acute/short term exposure - local effects		25 mg/m3	
Acetic acid 64-19-7	General population	inhalation	Acute/short term exposure - local effects		25 mg/m3	
Acetic acid 64-19-7	Workers	inhalation	Long term exposure - local effects		25 mg/m3	
Acetic acid 64-19-7	General population	inhalation	Long term exposure - local effects		25 mg/m3	
Methylsilanetriyl triacetate 4253-34-3	Workers	inhalation	Long term exposure - systemic effects		25 mg/m3	
Methylsilanetriyl triacetate 4253-34-3	Workers	inhalation	Acute/short term exposure - systemic effects		25 mg/m3	
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/m3	
Methylsilanetriyl triacetate 4253-34-3	General population	inhalation	Acute/short term exposure - local effects		5,1 mg/m3	
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 -		1 mg/kg	

1		1	systemic effects	1	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Acute/short term exposure -	97,3 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	systemic effects Acute/short term exposure - local effects	24,2 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - systemic effects	97,3 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	Workers	inhalation	Long term exposure - local effects	24,2 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Acute/short term exposure - systemic effects	17,3 mg/m3	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Acute/short term exposure - local effects	4,3 mg/m3	
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/m3	
Decamethylcyclopentasiloxane 541-02-6	General population	inhalation	Long term exposure - local effects	4,3 mg/m3	
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:

Use only in well-ventilated areas.

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

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; >= 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.

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 black
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 Not determined Flash point $> 150 \, ^{\circ}\text{C} \ (> 302 \, ^{\circ}\text{F})$

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable

Vapour pressure < 0,1 mm hg

Relative vapour density: No data available / Not applicable

Density 1,04 g/cm³

()

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Partially soluble

(Solvent: Water)

Solubility (qualitative) Insoluble

(Solvent: Acetone)

Solubility (qualitative) Polymerises in presence of water. Partition coefficient: n-octanol/water No data available / Not applicable Auto-ignition temperature No data available / Not applicable 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

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

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

At higher temperatures (>150C) may release formaldehyde (traces).

Evolves acetic acid during cure.

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	Value	Value	Species	Method
CAS-No.	type			
Octamethylcyclotetrasilox	LD50	> 4.800 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
ane				Toxicity)
556-67-2				
Acetic acid	LD50	3.310 mg/kg	rat	not specified
64-19-7				
Methyltriacetoxysilane	LD50	1.600 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
4253-34-3				
Decamethylcyclopentasilo	LD50	> 5.000 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
xane				Toxicity)
541-02-6				
Dodecamethylcyclohexasi	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
loxane				
540-97-6				

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
Octamethylcyclotetrasilox ane 556-67-2	LD50	> 2.375 mg/kg	rat	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Decamethylcyclopentasilo xane 541-02-6	LD50	> 2.000 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Dodecamethylcyclohexasi loxane 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	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Octamethylcyclotetrasilox	LC50	36 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
ane						Inhalation Toxicity)
556-67-2						-
Decamethylcyclopentasilo	LC50	8,67 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
xane						Inhalation Toxicity)
541-02-6						-

Skin corrosion/irritation:

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

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

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
Octamethylcyclotetrasilox ane 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)
Decamethylcyclopentasilo xane 541-02-6	not irritating	24 h	rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Dodecamethylcyclohexasi loxane 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	Result	Test type	Species	Method
CAS-No.				
Octamethylcyclotetrasilox	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
ane		test		
556-67-2				
Methyltriacetoxysilane	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4253-34-3		test		
Decamethylcyclopentasilo	not sensitising	Mouse local lymphnode	mouse	equivalent or similar to OECD Guideline
xane		assay (LLNA)		429 (Skin Sensitisation: Local Lymph
541-02-6				Node Assay)
Dodecamethylcyclohexasi	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
loxane		test		
540-97-6				

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
Octamethylcyclotetrasilox ane 556-67-2	negative	bacterial gene mutation assay	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Octamethylcyclotetrasilox ane 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)
Octamethylcyclotetrasilox ane 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)
Acetic acid 64-19-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Acetic acid 64-19-7	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Acetic acid 64-19-7	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)
Decamethylcyclopentasilo xane 541-02-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Decamethylcyclopentasilo xane 541-02-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Decamethylcyclopentasilo xane 541-02-6	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Dodecamethylcyclohexasi loxane 540-97-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Dodecamethylcyclohexasi loxane 540-97-6		mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Octamethylcyclotetrasilox ane 556-67-2	negative	inhalation		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Octamethylcyclotetrasilox ane 556-67-2	negative	oral: gavage		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Acetic acid 64-19-7	negative	inhalation: vapour		rat	EU Method B.12 (Mutagenicity
Decamethylcyclopentasilo xane 541-02-6	negative	inhalation		rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)
Decamethylcyclopentasilo xane 541-02-6	negative	inhalation: vapour		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Dodecamethylcyclohexasi loxane 540-97-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Acetic acid 64-19-7	not carcinogenic	dermal	32 w daily	mouse	female	not specified

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
Octamethylcyclotetrasilox ane 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 $>= 1.000$ 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)
Decamethylcyclopentasilo xane 541-02-6	NOAEL P >= 160 ppm NOAEL F1 >= 160 ppm NOAEL F2 >= 160 ppm	two- generation study	inhalation: vapour	rat	EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
Dodecamethylcyclohexasi loxane 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
Octamethylcyclotetrasilox ane 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)
Octamethylcyclotetrasilox ane 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)
Acetic acid 64-19-7	NOAEL 290 mg/kg	oral: feed	8 w daily	rat	not specified
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)
Decamethylcyclopentasilo xane 541-02-6	NOAEL >= 1.000 mg/kg	oral: gavage	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Dodecamethylcyclohexasi loxane 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:

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

In the cured state contribution of this product to Environmental Hazards is insignificant in comparison to articles in which it is used.

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered. Do not empty into drains / surface water / ground water.

12.1. Toxicity

Toxicity (Fish):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
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)
Acetic acid 64-19-7	LC50	> 1.000 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Methyltriacetoxysilane 4253-34-3	LC50	> 110 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Decamethylcyclopentasiloxan e 541-02-6	LC50		96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Decamethylcyclopentasiloxan e 541-02-6	NOEC		90 d	Oncorhynchus mykiss	OECD Guideline 210 (fish early lite stage toxicity test)

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Octamethylcyclotetrasiloxane	EC50		48 h	Daphnia magna	EPA OTS 797.1300
556-67-2					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)
Acetic acid	EC50	> 1.000 mg/l	48 h	Daphnia magna	OECD Guideline 202
64-19-7					(Daphnia sp. Acute
					Immobilisation Test)
Decamethylcyclopentasiloxan	EC50		48 h	Daphnia magna	OECD Guideline 202
e					(Daphnia sp. Acute
541-02-6					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	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Octamethylcyclotetrasiloxane	NOEC	7.9 µg/l	21 d	Daphnia magna	EPA OTS 797.1330
556-67-2					(Daphnid Chronic Toxicity
					Test)
Decamethylcyclopentasiloxan	NOEC		21 d	Daphnia magna	OECD 211 (Daphnia
e					magna, Reproduction Test)
541-02-6					
Dodecamethylcyclohexasiloxa	NOEC			Daphnia magna	OECD 211 (Daphnia
ne					magna, Reproduction Test)
540-97-6					

Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_	1	
Octamethylcyclotetrasiloxane	EC50		96 h	Selenastrum capricornutum	EPA OTS 797.1050 (Algal
556-67-2				(new name: Pseudokirchneriella subcapitata)	Toxicity, Tiers I and II)
Octamethylcyclotetrasiloxane	NOEC	< 0,022 mg/l	96 h	Selenastrum capricornutum	EPA OTS 797.1050 (Algal
556-67-2				(new name: Pseudokirchneriella	Toxicity, Tiers I and II)
				subcapitata)	
Acetic acid	EC50	> 1.000 mg/l	72 h	Skeletonema costatum	ISO 10253:2006 (Marine
64-19-7					algal growth inhibition test)
Acetic acid	NOEC	1.000 mg/l	72 h	Skeletonema costatum	ISO 10253:2006 (Marine
64-19-7					algal growth inhibition test)
Decamethylcyclopentasiloxan	NOEC		96 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
e				(new name: Pseudokirchneriella	Growth Inhibition Test)
541-02-6				subcapitata)	
Decamethylcyclopentasiloxan	EC50		96 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
e				(new name: Pseudokirchneriella	Growth Inhibition Test)
541-02-6				subcapitata)	
Dodecamethylcyclohexasiloxa	NOEC			Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
ne					Growth Inhibition Test)
540-97-6					
Dodecamethylcyclohexasiloxa	EC50			Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
ne					Growth Inhibition Test)
540-97-6					·

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	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)
Acetic acid 64-19-7	NOEC	1.150 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
Decamethylcyclopentasiloxan e 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)
Acetic acid 64-19-7	readily biodegradable	aerobic	89 - 99 %	30 d	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)
Decamethylcyclopentasiloxan e 541-02-6	not readily biodegradable.	aerobic	0,14 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Dodecamethylcyclohexasiloxa ne 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

No data available for the product.

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

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Octamethylcyclotetrasiloxane 556-67-2	6,488	25,1 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow- Stirring Method)
Acetic acid 64-19-7	-0,17	25 °C	other guideline:
Decamethylcyclopentasiloxan e 541-02-6	8,023	25,3 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-Stirring Method)
Dodecamethylcyclohexasiloxa ne 540-97-6	8,87	23,6 °C	not specified

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Octamethylcyclotetrasiloxane	Fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
556-67-2	Bioaccumulative (vPvB) criteria.
Acetic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
64-19-7	Bioaccumulative (vPvB) criteria.
Methyltriacetoxysilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4253-34-3	Bioaccumulative (vPvB) criteria.
Decamethylcyclopentasiloxane	very Persistent and very Bioaccumulative (vPvB)
541-02-6	
Dodecamethylcyclohexasiloxane	Fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
540-97-6	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 < 5,00 % (2010/75/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:

H226 Flammable liquid and vapor.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H361f Suspected of damaging fertility.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.