

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

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LOCTITE SI 5660

SDS No. : 463003 V004.0 Revision: 12.11.2020 printing date: 13.11.2020 Replaces version from: 15.05.2019

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

- **1.1. Product identifier** LOCTITE SI 5660
- **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):	
Flammable liquids	Category 3
H229 Pressurized container: May burst if heated.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Signal word:WarningHazard statement:H229 Pressurized container: May burst if heated.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.No smoking.P251 Do not pierce or burn, even after use.P273 Avoid release to the environment.
Precautionary statement: Storage	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3. Other hazards

The aerosol container is under pressure. Do not expose to high temperatures.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
octamethylcyclotetrasiloxane	209-136-7	0,01 - < 0,1 %	Flam. Liq. 3
556-67-2	01-2119529238-36		H226
			Repr. 2
			H361f
			Aquatic Chronic 1
			H410
			EU. REACH Candidate List of Substances of
			Very High Concern for Authorization
			(SVHC)
			M factor (Chron Aquat Tox): 10

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 if necessary.

Ingestion: Do not induce vomiting. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

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 case of fire, keep containers cool with water spray. Formaldehyde Silica fume

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. Wear protective equipment. Ensure adequate ventilation.

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. 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

Use only in well-ventilated areas. Vapours should be extracted to avoid inhalation. Avoid skin and eye contact. See advice in section 8

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 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
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ррт	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		10	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental		Value				Remarks
	Compartment	period		-	-		
			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)				00		
Octamethylcyclotetrasiloxane	sediment				0,3 mg/kg		
556-67-2	(marine water)						
Octamethylcyclotetrasiloxane	oral				41 mg/kg		
556-67-2					0.0		
Octamethylcyclotetrasiloxane	Soil				0,54 mg/kg		
556-67-2					0.0		

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/m3	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Long 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	oral	Long term exposure - systemic effects		3,7 mg/kg	
Octamethylcyclotetrasiloxane 556-67-2	Workers	inhalation	Acute/short 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	General population	inhalation	Acute/short 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	oral	Acute/short term exposure - systemic effects		3,7 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)

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	pressurized can					
	paste					
	grey					
Odor	None					
Odour threshold	No data available / Not applicable					
pН	Not applicable					
Melting point	No data available / Not applicable					
Solidification temperature	No data available / Not applicable					
Initial boiling point	> 200 °C (> 392 °F)					
Flash point	No data available / Not applicable					
Evaporation rate	No data available / Not applicable					
Flammability	No data available / Not applicable					
Explosive limits	No data available / Not applicable					
Vapour pressure	< 700 mbar					
(50 °C (122 °F))						
Relative vapour density:	No data available / Not applicable					
Density	1,45 g/cm3					
0						
Bulk density	No data available / Not applicable					
Solubility	No data available / Not applicable					
Solubility (qualitative)	Polymerises in presence of water.					
(Solvent: Water)						
Solubility (qualitative)	Not determined					
(Solvent: Acetone)						
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

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 Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

Methanol is liberated slowly upon exposure to moisture.

SECTION 11: Toxicological information

General toxicological information:

Methanol released during polymerisation of RTV silicones is toxic by inhalation. It is also highly flammable

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				

Acute dermal 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	> 2.375 mg/kg	rat	equivalent or similar to OECD Guideline 402 (Acute
ane				Dermal Toxicity)
556-67-2				

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						

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
octamethylcyclotetrasilox ane	not irritating		rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
556-67-2				

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	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
ane				Irritation / Corrosion)
556-67-2				

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
octamethylcyclotetrasilox	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
ane		test		
556-67-2				

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)
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)

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
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)

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	Result / Value	Route of	Exposure time /	Species	Method
CAS-No.		application	Frequency of		
			treatment		
octamethylcyclotetrasilox	LOAEL 35 ppm	inhalation	6 h nose only	rat	OECD Guideline 412
ane			inhalation		(Repeated Dose
556-67-2			5 days/week for 13		Inhalation Toxicity:
			weeks		28/14-Day)
octamethylcyclotetrasilox	NOAEL 960 mg/kg	dermal	3 w	rabbit	equivalent or similar to
ane			5 d/w		OECD Guideline 410
556-67-2					(Repeated Dose Dermal
					Toxicity: 21/28-Day
					Study)

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. 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	NOEC	0,0044 mg/l	93 d	Salmo gairdneri (new name:	EPA OPPTS 797.1600 (Fish
556-67-2				Oncorhynchus mykiss)	Early Life Stage Toxicity
					Test)
octamethylcyclotetrasiloxane	LC50	Toxicity > Water	96 h	Oncorhynchus mykiss	EPA OTS 797.1400 (Fish
556-67-2		solubility			Acute 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
	EC50	Toxicity > Water solubility	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)

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	I G	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)

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	Toxicity > Water	96 h	Selenastrum capricornutum	EPA OTS 797.1050 (Algal
556-67-2		solubility		(new name: Pseudokirchneriella	Toxicity, Tiers I and II)
				subcapitata)	-
octamethylcyclotetrasiloxane	EC10	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)	

Toxicity to microorganisms

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		Toxicity > Water solubility	3 h	U U	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
octamethylcyclotetrasiloxane	not readily biodegradable.	aerobic	3,7 %	29 d	OECD Guideline 310 (Ready
556-67-2					BiodegradabilityCO2 in Sealed
					Vessels (Headspace Test)

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
octamethylcyclotetrasiloxane 556-67-2	12.400	28 d		· · · · ·	EPA OTS 797.1520 (Fish Bioconcentration Test-Rainbow
				1	Trout)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
octamethylcyclotetrasiloxane	6,488	25,1 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-
556-67-2			Stirring Method)

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.

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

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.

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

SECTION 14: Transport information

14.1.	UN number				
	ADR	1950			
	RID	1950			
	ADN	1950			
	IMDG	1950			
	IATA	1950			
14.2.	UN proper shipping name				
	ADR	AEROSOLS			
	RID	AEROSOLS			
	ADN	AEROSOLS			
	IMDG	AEROSOLS			
	IATA	Aerosols, non-flammable			
14.3.	Transport hazard class(es)				
	ADR	2.2			
	RID	2.2			
	ADN	2.2			
	IMDG	2.2			
	IATA	2.2			
	IAIA	2.2			
14.4.	Packing group				
	ADR				
	RID				
	ADN				
	IMDG				
	IATA				
14.5.	E	h			
14.5.	Environmental	nazarus			
	ADR	not applicable			
	RID	not applicable			
	ADN	not applicable			
	IMDG	not applicable			
	IATA	not applicable			
14.6.	Special precautions for user				
	ADR	not applicable			

	Tunnelcode: (E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

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 (2010/75/EC) < 5 %

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.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

Further information:

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