

LOCTITE 561

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

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SDS No.: 153640

V004.4 Revision: 02.06.2015

printing date: 05.04.2016

Replaces version from: 23.02.2015

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

1.1. Product identifier

LOCTITE 561

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

Intended use:

Sealant

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@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):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information EUH210 Safety data sheet available on request.

2.3. Other hazards

None if used properly.

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Anaerobic Sealant

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Polyamide wax~	477-310-1 01-0000019941-65	5-< 10 %	Aquatic Chronic 4 H413
Ethane-1,2-diol 107-21-1	203-473-3 01-2119456816-28	1-< 5 %	Acute Tox. 4; Oral H302
Cumene hydroperoxide 80-15-9	201-254-7	0,1-< 1 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314
N,N-Diethyl-p-toluidine 613-48-9	210-345-0	0,1-< 1 %	Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Acute Tox. 3; Inhalation H331 STOT RE 2 H373 Aquatic Chronic 3 H412
1,4-Naphthalenedione 130-15-4	204-977-6	0,25- 2,5 %O	Acute Tox. 3; Oral H301 Skin Irrit. 2; Dermal H315 Skin Sens. 1; Dermal H317 Eye Irrit. 2 H319 Acute Tox. 1; Inhalation H330 STOT SE 3; Inhalation H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M factor: 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

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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

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:

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 (NOx) can be released.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

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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 original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

7.3. Specific end use(s)

Sealant

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	edient [Regulated substance] ppm mg/m³ Value type		Short term exposure limit category / Remarks	Regulatory list	
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE		6	Time Weighted Average (TWA):		EH40 WEL
DUST] Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE		2,4	Time Weighted Average (TWA):		EH40 WEL
DUST] Ethane-1,2-diol 107-21-1	40	104	Short Term Exposure Limit (STEL):		EH40 WEL
[ETHANE-1,2-DIOL, VAPOUR] Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]		10	Time Weighted Average (TWA):		EH40 WEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]	20	52	Time Weighted Average (TWA):		EH40 WEL
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	20	52	Time Weighted Average (TWA):	Indicative	ECTLV
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	40	104	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Cumene 98-82-8 [CUMENE]	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
Cumene 98-82-8 [CUMENE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Cumene 98-82-8 [CUMENE]	25	125	Time Weighted Average (TWA):		EH40 WEL
Cumene 98-82-8 [CUMENE]	50	250	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Cumene 98-82-8 [CUMENE]	20	100	Time Weighted Average (TWA):	Indicative	ECTLV

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Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Value	Value			Remarks
		mg/l	ppm	mg/kg	others	
Ethane-1,2-diol	aqua				10 mg/L	
107-21-1	(freshwater)					
Ethane-1,2-diol	aqua (marine				1 mg/L	
107-21-1	water)					
Ethane-1,2-diol	sediment			20,9 mg/kg		
107-21-1	(freshwater)					
Ethane-1,2-diol	STP				199,5 mg/L	
107-21-1						
Ethane-1,2-diol	aqua				10 mg/L	
107-21-1	(intermittent					
	releases)					
Ethane-1,2-diol	soil			1,53 mg/kg		
107-21-1						

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Ethane-1,2-diol 107-21-1	Workers	Dermal	Long term exposure - systemic effects		106 mg/kg bw/day	
Ethane-1,2-diol 107-21-1	Workers	Inhalation	Long term exposure - local effects		35 mg/m3	
Ethane-1,2-diol 107-21-1	general population	Dermal	Long term exposure - systemic effects		53 mg/kg bw/day	
Ethane-1,2-diol 107-21-1	general population	Inhalation	Long term exposure - local effects		7 mg/m3	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

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Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance waxv

Off white Odor mild

Odour threshold No data available / Not applicable

pН No data available / Not applicable

Initial boiling point $> 150 \, ^{\circ}\text{C} \, (> 302 \, ^{\circ}\text{F})$ Flash point Not applicable

No data available / Not applicable Decomposition temperature

Vapour pressure (25 °C (77 °F)) < 13 mbar

1,14 g/cm3 Density

() Bulk density No data available / Not applicable No data available / Not applicable Viscosity Viscosity (kinematic) No data available / Not applicable Explosive properties No data available / Not applicable

Solubility (qualitative) Slight

(Solvent: Water) Solidification temperature No data available / Not applicable Melting point No data available / Not applicable Flammability No data available / Not applicable Auto-ignition temperature No data available / Not applicable Explosive limits No data available / Not applicable No data available / Not applicable Partition coefficient: n-octanol/water

Evaporation rate No data available / Not applicable No data available / Not applicable Vapor density Oxidising properties No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong acids. Reacts with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Oxides of carbon.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

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

Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

May cause irritation to respiratory system.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Prolonged or repeated contact may cause eye irritation.

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Ethane-1,2-diol	Acute	500 mg/kg	oral			Expert judgement
107-21-1	toxicity					
	estimate					
	(ATE)					
Ethane-1,2-diol	LD50	> 2.000 mg/kg			rat	EU Method B.1 (Acute
107-21-1						Toxicity (Oral))
Cumene hydroperoxide	LD50	550 mg/kg	oral		rat	
80-15-9						

Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		

Acute dermal toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Ethane-1,2-diol 107-21-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	

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Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Ecotoxicity:

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

Hazardous components CAS-No.	Value	Value	Acute	Exposure time	Species	Method
CAS-No.	type		Toxicity Study	time		
Ethane-1,2-diol	NOEC	15.380 mg/l	Fish	28 d	Oryzias latipes	OECD Guideline
107-21-1						204 (Fish,
						Prolonged Toxicity
						Test: 14-day Study)
	LC50	72.860 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
						203 (Fish, Acute
	[Toxicity Test)
Ethane-1,2-diol	EC50	34.400 mg/l	Daphnia	48 h	Ceriodaphnia sp.	OECD Guideline
107-21-1						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Ethane-1,2-diol	EC50	> 20.000 mg/l	Algae		Microcystis aeruginosa	OECD Guideline
107-21-1						201 (Alga, Growth
						Inhibition Test)
Ethane-1,2-diol	NOEC	8.590 mg/l	chronic	7 d	Ceriodaphnia sp.	OECD 211
107-21-1			Daphnia			(Daphnia magna,
	1 .					Reproduction Test)
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9						203 (Fish, Acute
						Toxicity Test)
Cumene hydroperoxide	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
80-15-9						202 (Daphnia sp.
						Acute
						Immobilisation
			J			Test)
Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
80-15-9						201 (Alga, Growth
						Inhibition Test)
1,4-Naphthalenedione	EC50	0,011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline
130-15-4						201 (Alga, Growth
						Inhibition Test)

12.2. Persistence and degradability

$\label{persistence} \textbf{Persistence and Biodegradability:}$

The product is not biodegradable.

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		

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Polyamide wax~		no data	24 %	OECD 301 A - F
Ethane-1,2-diol 107-21-1	readily biodegradable	aerobic	83 - 96 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Polyamide wax~	> 6,5				22 °C	OECD Guideline 117 (Partition Coefficient (noctanol / water), HPLC Method)
Ethane-1,2-diol 107-21-1	-1,36					
Cumene hydroperoxide 80-15-9 Cumene hydroperoxide	2,16	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
80-15-9 1,4-Naphthalenedione 130-15-4	1,71					

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Polyamide wax~	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethane-1,2-diol 107-21-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

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

Disposal must be made according to official regulations.

Waste code

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

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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. Packaging 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 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content < 3 % (1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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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:

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

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

Label elements (DPD):

Risk phrases:

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

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.