

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

Page 1 of 9

Loctite 577

sds no. : 168431 V005.9 Revision: 03.10.2012 printing date: 04.02.2014

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

# 1.1. Product identifier

Loctite 577 **1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use: Anaerobic Sealant

# 1.3. Details of the supplier of the safety data sheet

Henkel Limited 2 Bishop Square Business Park AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933 Fax-no.: +44 1606 863762

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 (DPD):** 

Sensitizing R43 May cause sensitisation by skin contact.

2.2. Label elements

# Label elements (DPD):

Xi - Irritant



Risk phrases:

R43 May cause sensitisation by skin contact.

# Safety phrases:

S24 Avoid contact with skin.

S37 Wear suitable gloves.S51 Use only in well-ventilated areas.

### Additional labeling:

For consumer use only: S2 Keep out of the reach of children S46 If swallowed, seek medical advice immediately and show this container or label.

Contains: Maleic acid

2.3. Other hazards

None if used properly.

**SECTION 3: Composition/information on ingredients** 

General chemical description: Anaerobic Sealant

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Lauryl methacrylate 142-90-5	205-570-6	>= 0-< 10 %	Serious eye irritation 2 H319
			Skin irritation 2 H315
			Specific target organ toxicity - single
			exposure 3
			H335
Tetradecyl methacrylate	219-835-9	>= 0-< 10 %	Specific target organ toxicity - single
2549-53-3			exposure 3
			H335
			Skin irritation 2
			H315
			Serious eye irritation 2
XX 1 1 1 1	210 (72.2	0 10 0/	H319
Hexadecyl methacrylate 2495-27-4	219-672-3	>= 0-< 10 %	Specific target organ toxicity - single
2493-27-4			exposure 3 H335
			Skin irritation 2
			H315
			Serious eye irritation 2
			H319
Maleic acid	203-742-5	>= 0,1-< 1 %	Acute toxicity 4; Oral
110-16-7			H302
			Serious eye irritation 2
			H319
			Specific target organ toxicity - single
			exposure 3
			H335
			Skin irritation 2 H315
			Skin sensitizer 1
			H317
Cumene hydroperoxide	201-254-7	>= 0-< 1%	Acute toxicity 4; Dermal
80-15-9	201 251 7	>= 0 < 170	H312
00 10 7			Specific target organ toxicity - repeated
			exposure 2
			H373
			Acute toxicity 3; Inhalation
			H331
			Acute toxicity 4; Oral
			H302
			Organic peroxides E
			H242
			Chronic hazards to the aquatic environment 2 H411
			Skin corrosion 1B
			H314
			11514

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

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Lauryl methacrylate 142-90-5	205-570-6	>= 0-< 10 %	Xi - Irritant; R36/37/38
Tetradecyl methacrylate 2549-53-3	219-835-9	>= 0-< 10 %	Xi - Irritant; R36/37/38
Hexadecyl methacrylate 2495-27-4	219-672-3	>= 0-< 10 %	Xi - Irritant; R36/37/38
Maleic acid 110-16-7	203-742-5	>= 0,1 - < 1 %	Xn - Harmful; R22 Xi - Irritant; R36/37/38 R43
Cumene hydroperoxide 80-15-9	201-254-7	>= 0-< 1 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 O - Oxidizing; R7 C - Corrosive; R34 N - Dangerous for the environment; R51/53

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

## Substances without classification may have community workplace exposure limits available.

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

Inhalation:

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

Skin contact: Rinse with running water and soap. Seek medical advice.

### Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

### Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting. Seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

SKIN: Rash, Urticaria.

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

None

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

## **5.3.** Advice for firefighters

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

### **Additional information:**

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

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Ensure adequate ventilation. See advice in chapter 8

### **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 Chapter 13.

## 6.4. Reference to other sections

See advice in chapter 8

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

### Use only in well-ventilated areas.

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

### 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)

Anaerobic Sealant

# **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters Valid for

Great Britain

None

### **Biological Exposure Indices:**

### 8.2. Exposure controls:

Respiratory protection:

Ensure adequate ventilation.

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

# Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

#### Eye protection:

Wear protective glasses.

### Skin protection:

Wear suitable protective clothing.

## **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Appearance	paste
	yellow
Odor	mild
рН	3 - 6
0	
Initial boiling point	Not determined
Flash point	No data available / Not applica
Decomposition temperature	No data available / Not applica
Vapour pressure (27 °C (80.6 °F))	< 5 mm hg
(27 C (80.0 F)) Density	1,15 - 1,20 g/cm3
0	, , , , , , , , , , , , , , , , , , , ,
Bulk density	No data available / Not applica
Viscosity	No data available / Not applica
Viscosity (kinematic)	No data available / Not applica
Explosive properties	No data available / Not applica
Solubility (qualitative)	Slight
(23 °C (73.4 °F); Solvent: Water)	
Solidification temperature	No data available / Not applica
Melting point	No data available / Not applica
Flammability	No data available / Not applica
Auto-ignition temperature	No data available / Not applica
Explosive limits	No data available / Not applica
Partition coefficient: n-octanol/water	No data available / Not applica
Evaporation rate	Not available.
Vapor density	Not available.
Oxidising properties	No data available / Not application

### 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

Irritating organic vapours. carbon oxides.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## General toxicological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# Oral toxicity:

This material is considered to have low toxicity if swallowed.

## Inhalative toxicity:

May cause irritation to respiratory system.

## Skin irritation:

Prolonged or repeated contact may cause skin irritation.

### Eye irritation:

May cause mild irritation to the eyes.

### Sensitizing:

May cause sensitization by skin contact.

## Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide	LD50	550 mg/kg	oral		rat	
80-15-9	LC50	220 ppm	inhalation	4 h	rat	
	LD50	500 mg/kg	dermal		rat	

## Skin corrosion/irritation:

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

## Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
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	

# **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. The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

### **Ecotoxicity:**

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

### Mobility:

Cured adhesives are immobile.

## Persistence and Biodegradability:

The product is not biodegradable.

### **Bioaccumulative potential:**

No data available.

## Other adverse effects:

Do not empty into drains, soil or bodies of water.

## 12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
			Study			
Maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	
Maleic acid 110-16-7	EC50	245 mg/l	Daphnia	24 h	Daphnia magna	
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Immobilisation Test) OECD Guideline 201 (Alga, Growth Inhibition Test)

# 12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Maleic acid 110-16-7	readily biodegradable	aerobic	87 - 88 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)

## 12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Maleic acid 110-16-7	-0,48					
Cumene hydroperoxide 80-15-9 Cumene hydroperoxide 80-15-9	2,16	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)

# **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.

Waste code

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

# **SECTION 14: Transport information**

## **General information:**

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

# **SECTION 15: Regulatory information**

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

< 5 %

VOC content (1999/13/EC)

# 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:

R21/22 Harmful in contact with skin and if swallowed.

R22 Harmful if swallowed.

R23 Toxic by inhalation.

R34 Causes burns.

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitisation by skin contact.

R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R7 May cause fire.

H242 Heating may cause a fire.

H302 Harmful if swallowed.

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.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

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

H411 Toxic to aquatic life with long lasting effects.

## Further information:

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

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and it's subsequent amendments, and Commission Directive 1999/45/EC.