



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

Page 1 of 9

LOCTITE 277

SDS No. : 153485

V003.1

Revision: 27.05.2015

printing date: 29.06.2015

Replaces version from: 12.02.2015

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

1.1. Product identifier

LOCTITE 277

Contains:

Cumene hydroperoxide

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

Intended use:

Anaerobic Adhesive

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):

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure

Category 3

H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word:

Warning

Hazard statement:	H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	P261 Avoid breathing vapours.
Precautionary statement: Response	P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Methacrylate resin based threadlocker

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cumene hydroperoxide 80-15-9	201-254-7	>= 1- < 2,5 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Skin Corr. 1B H314 Aquatic Chronic 2 H411
N,N-Diethyl-p-toluidine 613-48-9	210-345-0	> 0,1- < 0,9 %	Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Acute Tox. 3; Inhalation H331 STOT RE 2 H373 Aquatic Chronic 3 H412
N,N-dimethyl-o-toluidine 609-72-3	210-199-8	> 0,1- < 0,5 %	STOT RE 2 H373 Aquatic Chronic 3 H412 Acute Tox. 3; Inhalation H331 Acute Tox. 3; Dermal H311 Acute Tox. 3; Oral H301

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.
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

EYE: Irritation, conjunctivitis.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder
Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

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

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

Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

Oxides of carbon.

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.

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**

Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

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 Adhesive

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
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

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection:

Use only in well-ventilated areas.

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	liquid
	red
Odor	characteristic
Odour threshold	No data available / Not applicable
pH ()	3,00 - 6,00
Initial boiling point	No data available / Not applicable
Flash point	> 93,3 °C (> 199,94 °F); Tagliabue closed cup
Decomposition temperature	No data available / Not applicable
Vapour pressure (25,0 °C (77 °F))	< 0,1300000 mbar
Vapour pressure (50 °C (122 °F))	< 300 mbar
Density ()	1,0800 g/cm ³
Bulk density	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
Solubility (qualitative) (Solvent: Water)	Slight
Solubility (qualitative) (Solvent: Acetone)	Miscible
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
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	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**

Peroxides.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Oxides of carbon.

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 1 to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause respiratory irritation.

Oral toxicity:

This material is considered to have low toxicity if swallowed.
May cause irritation to the digestive tract.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Causes serious eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	

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
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	

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 type	Value	Acute Toxicity Study	Exposure time	Species	Method
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 Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

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

12.5. Results of PBT and vPvB assessment

No data available.

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

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.

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.
- H331 Toxic if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful 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.

Label elements (DPD):

Xi - Irritant



Risk phrases:

R36/37 Irritating to eyes and respiratory system.

Safety phrases:

- S23 Do not breathe vapour.
- S25 Avoid contact with eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 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.

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.