

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

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LOCTITE 277 250ML 2/CASE M/L

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

Product identifier:

LOCTITE 277 250ML 2/CASE M/L

Relevant identified uses of the substance or mixture and uses advised against:

Intended use: Anaerobic

Details of the supplier of the safety data sheet:

Henkel Limited

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SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

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

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.

Other hazards:

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Methacrylate resin based threadlocker

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Cumene hydroperoxide 80-15-9	201-254-7	> 1-< 2,5 %	Acute toxicity 4; Dermal H312
			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
~		0.4	H314
Cumene	202-704-5	> 0,1-< 0,5 %	Flammable liquids 3
98-82-8			H226
			Aspiration hazard 1 H304
			Specific target organ toxicity - single
			exposure 3
			H335
			Chronic hazards to the aquatic environment 2
2222 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	****	0.4	H411
N,N-dimethyl-o-toluidine	210-199-8	> 0,1-< 0,5 %	Acute toxicity 3; Inhalation
609-72-3			H331
			Acute toxicity 3; Dermal H311
			Acute toxicity 3; Oral
			H301
			Specific target organ toxicity - repeated
			exposure 2
			H373
			Chronic hazards to the aquatic environment 3
			H412

Only dangerous ingredients for which a CLP classification is already available are displayed in this table. 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 according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cumene hydroperoxide	201-254-7	> 1 - < 2,5 %	T - Toxic; R23
80-15-9			Xn - Harmful; R21/22, R48/20/22
			O - Oxidizing; R7
			C - Corrosive; R34
			N - Dangerous for the environment; R51, R53
Cumene	202-704-5	> 0,1 - < 0,5 %	R10
98-82-8			Xn - Harmful; R65
			Xi - Irritant; R37
			N - Dangerous for the environment; R51, R53
N,N-dimethyl-o-toluidine	210-199-8	> 0,1 -< 0,5 %	R52, R53
609-72-3			T - Toxic; R23/24/25
			R33

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

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.

Most important symptoms and effects, both acute and delayed:

SKIN: Rash, Urticaria.

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

Indication of any immediate medical attention and special treatment needed:

See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:

Suitable extinguishing media:

Carbon dioxide, foam, powder

Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

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.

Advice for firefighters:

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid skin and eye contact.

Ensure adequate ventilation.

Environmental precautions:

Do not let product enter drains.

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.

Reference to other sections:

See advice in chapter 8

SECTION 7: Handling and storage

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.

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.

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.

Specific end use(s):

Anaerobic

SECTION 8: Exposure controls/personal protection

Control parameters:

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
CUMENE	25	125	Time Weighted Average		EH40 WEL
98-82-8			(TWA):		
CUMENE	50	250	Short Term Exposure		EH40 WEL
98-82-8			Limit (STEL):		
CUMENE			Skin designation:	Can be absorbed through the	EH40 WEL
98-82-8				skin.	
CUMENE			Skin designation:	Can be absorbed through the	ECTLV
98-82-8				skin.	
CUMENE	50	250	Short Term Exposure	Indicative	ECTLV
98-82-8			Limit (STEL):		
CUMENE	20	100	Time Weighted Average	Indicative	ECTLV
98-82-8			(TWA):		

Exposure controls:

Respiratory protection:

Use only in well-ventilated areas.

Hand protection:

The use of chemical resistant gloves such as Nitrile are recommended.

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. 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

Information on basic physical and chemical properties:

Appearance liquid

red

Odor characteristic

pH 3,00 - 6,00

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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 < 0,1300000 mbar

(25,0 °C (77 °F))

Density 1,0800 g/cm3

()

Bulk densityNo data available / Not applicableViscosityNo data available / Not applicableViscosity (kinematic)No data available / Not applicableExplosive propertiesNo data available / Not applicable

Solubility (qualitative) Slight

(Solvent: Water)
Solubility (qualitative)
Miscible

(Solvent: Acetone)

Solidification temperature No data available / Not applicable Melting point No data available / Not applicable Flammability No data available / Not applicable No data available / Not applicable Auto-ignition temperature Explosive limits No data available / Not applicable No data available / Not applicable Partition coefficient: n-octanol/water Evaporation rate No data available / Not applicable Vapor density No data available / Not applicable Oxidising properties No data available / Not applicable

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:

Peroxides.

Possibility of hazardous reactions:

See section reactivity

Conditions to avoid:

Stable

Incompatible materials:

None if used properly.

Hazardous decomposition products:

Oxides of carbon.

SECTION 11: Toxicological information

$\label{lem:condition} General\ toxicological\ information:$

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.

May cause irritation to the digestive tract.

Inhalative toxicity:

Irritating to respiratory system

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Irritating to eyes.

Acute toxicity:

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

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

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.

Toxicity:

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity Study	time		
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9	Leso	3,7 mg r	11311) o n	Oncomynenas mykiss	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
						Test)
Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
80-15-9						201 (Alga, Growth
_						Inhibition Test)
Cumene	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
98-82-8						203 (Fish, Acute
Cumene	EC50	4/1	Dombnia	48 h	Dankaia maana	Toxicity Test) OECD Guideline
98-82-8	ECSU	4 mg/l	Daphnia	48 II	Daphnia magna	
90-02-0						202 (Daphnia sp. Acute
						Immobilisation
						Test)
Cumene	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
98-82-8		_,g/1	840		(new name: Pseudokirchnerella	
					subcapitata)	Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene 98-82-8		aerobic	86 %	

Bioaccumulative potential / Mobility in soil:

Hazardous components	LogKow	Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.		factor (BCF)	time			
Cumene hydroperoxide		9,1				OECD Guideline 305
80-15-9						(Bioconcentration: Flow-
						through Fish Test)
Cumene hydroperoxide	2,16					-
80-15-9						
Cumene		35,5		Carassius auratus		OECD Guideline 305
98-82-8						(Bioconcentration: Flow-
						through Fish Test)
Cumene	3,55				23 °C	OECD Guideline 107
98-82-8						(Partition Coefficient (n-
						octanol / water), Shake
						Flask Method)

SECTION 13: Disposal considerations

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

General information:

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

SECTION 15: Regulatory information

 $Safety, health \ and \ environmental \ regulations/legislation \ specific \ for \ the \ substance \ or \ mixture:$

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

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:

- R10 Flammable.
- R21/22 Harmful in contact with skin and if swallowed.
- R23 Toxic by inhalation.
- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- R33 Danger of cumulative effects.
- R34 Causes burns.
- R37 Irritating to respiratory system.
- R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
- R51 Toxic to aquatic organisms.
- R52 Harmful to aquatic organisms.
- R53 May cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R7 May cause fire.
- H226 Flammable liquid and vapour.
- H242 Heating may cause a fire.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- 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.
- 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.

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.