

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

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sds no.: 153499 V003.4

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Loctite 510

# 1. Identification of the substance/mixture and of the company/undertaking

#### **Product identifier:**

Loctite 510

## 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 Ireland Limited Product Safety & Regulatory Affairs Tallaght Business Park, Whitestown Dublin 24

Ireland

Phone: +353 (14046444) Fax-no.: +353 (14519926)

ua-products a fety.uk@uk.henkel.com

### **Emergency telephone number:**

24 Hours Emergency Tel: +44 (0)1442 278497

# 2. Hazards identification

# Classification of the substance or mixture:

### Classification (DPD):

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

Sensitizing

R43 May cause sensitisation by skin contact.

N - Dangerous for the

environment

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

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## Label elements (DPD):

N - Dangerous for the environment

Xi - Irritant





#### Risk phrases:

R36/37 Irritating to eyes and respiratory system.

R43 May cause sensitisation by skin contact.

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

#### Safety phrases:

S23 Do not breathe vapour.

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 Wear suitable gloves.

S51 Use only in well-ventilated areas.

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

### 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:

1,1'-(methylenedi-p-phenylene)bismaleimide

## Other hazards:

This product contains a solid compound, which in powder form is classified as toxic by inhalation. The product is not labelled accordingly as such exposure can be excluded under normal and foreseeable conditions. In the case that the product is used divergently under formation of aerosols, measures have to be observed to exclude inhalational exposure.

# 3. Composition/information on ingredients

# General chemical description:

Anaerobic Sealant

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Cumene hydroperoxide	201-254-7	> 1-<= 3 %	Acute toxicity 4; Dermal
80-15-9			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
			H314
Cumene	202-704-5	> 0,1-<= 1 %	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
			H411

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
1,1'-(methylenedi-p-	237-163-4	> 5 - <= 10 %	T - Toxic; R23
phenylene)bismaleimide			Xi - Irritant; R36/37/38, R43
13676-54-5			N - Dangerous for the environment; R50/53
Cumene hydroperoxide	201-254-7	> 1 - <= 3 %	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 -<= 1 %	R10
98-82-8			Xn - Harmful; R65
			Xi - Irritant; R37
			N - Dangerous for the environment; R51, R53

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.

## 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.

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### Most important symptoms and effects, both acute and delayed:

May cause sensitization by skin contact.

#### Indication of any immediate medical attention and special treatment needed:

See section: Description of first aid measures

# 5. Firefighting measures

#### **Extinguishing media:**

#### Suitable extinguishing media:

Carbon dioxide, foam, powder

## Special hazards arising from the substance or mixture:

Do not expose to direct heat.

#### Advice for firefighters:

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

#### **Additional information:**

Do not inhale vapors and fumes.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Avoid skin and eye contact.

Ensure adequate ventilation.

See advice in chapter 8

## **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.

# 7. Handling and storage

### 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.

### 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.

#### **Specific end use(s):**

Anaerobic

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## 8. Exposure controls/personal protection

### **Control parameters:**

Valid for

Great Britain

Ingredient	ppm	mg/m <sup>3</sup>	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.

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.

# 9. Physical and chemical properties

# Information on basic physical and chemical properties:

Appearance gel gel pink
Odor Mild

pH not applicable Initial boiling point > 150 °C (> 302 °F) Flash point > 100 °C (> 212 °F)

Decomposition temperature No data available / Not applicable

Vapour pressure < 5 mm hg

(27 °C (80.6 °F))

Density 1,178 g/cm3

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

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Explosive properties No data available / Not applicable

Solubility (qualitative) Slight

(Solvent: Water)

Solidification temperature

Melting point

No data available / Not applicable

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

No data available / Not applicable

Vapor density Not available

Oxidising properties No data available / Not applicable

### Other information:

No data available / Not applicable

# 10. Stability and reactivity

#### Reactivity:

Reaction with strong acids. Reacts with strong oxidants.

#### Chemical stability:

Stable under recommended storage conditions.

#### Possibility of hazardous reactions:

See section reactivity

#### Conditions to avoid:

Stable

#### **Incompatible materials:**

None if used properly.

# Hazardous decomposition products:

Irritating organic vapours. carbon oxides. Sulphur oxides nitrogen oxides

# 11. Toxicological information

#### **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.

# Inhalative toxicity:

Irritating to respiratory system

### Skin irritation:

May cause sensitization by skin contact.

## Eye irritation:

Irritating to eyes.

### Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide	irritating			
13676-54-5				

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## Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide	not irritating			
13676-54-5				

## Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
1,1'-(methylenedi-p-	sensitising			
phenylene)bismaleimide				
13676-54-5				

# 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:**

Toxic to aquatic organisms

May cause long-term adverse effects in the aquatic environment.

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

### Mobility:

Cured adhesives are immobile.

## **Toxicity:**

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity	time		
1.11/ .1.1	Y 050	0.01 //	Study	0.51		oran a : i i:
1,1'-(methylenedi-p-	LC50	0,91 mg/l	Fish	96 h	Carassius sp.	OECD Guideline
phenylene)bismaleimide						203 (Fish, Acute
13676-54-5	Y 050	2.0 //		0.51		Toxicity Test)
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9						203 (Fish, Acute
	F.050	40 #	<b>.</b>	40.1	5	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
_						Toxicity Test)
Cumene	EC50	4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
98-82-8						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Cumene	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
98-82-8					(new name: Pseudokirchnerella	201 (Alga, Growth
					subcapitata)	Inhibition Test)

# Persistence and degradability:

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

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1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	aerobic	0 %	
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 CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Cumene hydroperoxide 80-15-9		9,1	ume			OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					unough Fion Testy
Cumene 98-82-8  Cumene 98-82-8	3,55	35,5		Carassius auratus	23 °C	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) OECD Guideline 107 (Partition Coefficient (n-
75 62 6						octanol / water), Shake Flask Method)

# 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.

## Waste code

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

# 14. Transport information

# Road transport ADR:

Class: 9
Packaging group: III
Classification code: M6
Hazard ident. number: 90
UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Diphenylmethane Bismaleimide)

Tunnelcode: (E)

# Railroad transport RID:

Class: 9
Packaging group: III
Classification code: M6
Hazard ident. number: 90
UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Diphenylmethane Bismaleimide)

Tunnelcode:

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## Inland water transport ADN:

Class: 9
Packaging group: III
Classification code: M6
Hazard ident. number:

UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Diphenylmethane Bismaleimide)

#### **Marine transport IMDG:**

 Class:
 9

 Packaging group:
 III

 UN no.:
 3082

 Label:
 9

 EmS:
 F-A ,S-F

 Seawater pollutant:
 Marine p

Seawater pollutant: Marine pollutant
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Diphenylmethane Bismaleimide)

# Air transport IATA:

Class: 9
Packaging group: III
Packaging instructions (passenger) 914
Packaging instructions (cargo) 914
UN no.: 3082
Label: 9

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Diphenylmethane

Bismaleimide)

# 15. Regulatory information

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

VOC content < 3 % (As defined in the Council Directive 2004/42/EC) (2004/42/EC)

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## 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.

R34 Causes burns.

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

R37 Irritating to respiratory system.

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.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51 Toxic 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.

H226Flammable liquid and vapour.

H242Heating may cause a fire.

H302Harmful if swallowed.

H304May be fatal if swallowed and enters airways.

H312Harmful in contact with skin.

H314Causes severe skin burns and eye damage.

H331Toxic if inhaled.

H335May cause respiratory irritation.

H373May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H411Toxic 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.