



## Safety Data Sheet in compliance with Indian Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000

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LOCTITE 510

MSDS-No. : 153499

V001.1

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

#### Product identifier

LOCTITE 510

Material: 230410

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

Intended use:  
Anaerobic Sealant

#### Identification of manufacturer, importer or distributor:

Manufacturer: Henkel Adhesives Technologies India Pvt. Ltd. D3/D4, MIDC, Jejuri - 412303 India. TEL : +91 9272203768 FAX : +91 2115 253248, Website www.henkel.com

#### Emergency telephone number

IN HAT: +91 9272203768

In case of any emergency call Poison Information Centre, JSS Hospital, Mysore: Toll Free No: 1800-425-0207/Mobile: +91 8892 42 5667

### SECTION 2: Hazards identification

#### Classification of the substance or mixture

##### Classification (DPD):

Xn - Harmful  
R20 Harmful by inhalation.  
Sensitizing  
R43 May cause sensitisation by skin contact.  
Xi - Irritant  
R36/37 Irritating to eyes and respiratory system.

#### Label elements

##### Label elements (DPD):

##### Risk phrases:

R20 Harmful by inhalation.  
R36/37 Irritating to eyes and respiratory system.  
R43 May cause sensitisation by skin contact.

##### Safety phrases:

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.  
S60 This material and its container must be disposed of as hazardous waste.

**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.

**SECTION 3: Composition/information on ingredients****General chemical description:**

Anaerobic Sealant

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

Hazardous components CAS-No.	EC Number	content	Classification
1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5	237-163-4	>= 1 - <= 30 %	T - Toxic; R23 Xi - Irritant; R43
Cumene hydroperoxide 80-15-9	201-254-7	>= 1 - <= 20 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 C - Corrosive; R34 O - Oxidizing; R7 N - Dangerous for the environment; R51/53
Cumene 98-82-8	202-704-5	>= 0,1 - <= 10 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 N - Dangerous for the environment; R51/53
2-phenylpropan-2-ol 617-94-7	210-539-5	>= 0,1 - <= 10 %	Xi - Irritant; R36/38 Xn - Harmful; R22
Acetic acid, 2-phenylhydrazide 114-83-0	204-055-3	>= 0,1 - <= 10 %	Xn - Harmful; R22, R40 Xi - Irritant; R36/37/38, R43

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**

<b>Inhalation:</b>	If symptoms develop and persist, get medical attention. Move to fresh air.
<b>Skin contact:</b>	Wash with soap and water. If symptoms develop and persist, get medical attention. Remove contaminated clothing and footwear. Wash clothing before reuse.
<b>Eye contact:</b>	Get medical attention. Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time.
<b>Ingestion:</b>	Get medical attention. Do not induce vomiting. Keep individual calm.
<b>Symptoms/effects, acute and delayed:</b>	Eye, skin, and respiratory disorders.

**Section 5. Fire fighting measures**

**Suitable extinguishing media:** Foam, dry chemical or carbon dioxide.

**Specific hazards arising from the chemical:** None

**Special protection equipment and precautions for firefighters:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Hazardous combustion products:** Oxides of sulfur.  
Oxides of nitrogen.  
Oxides of carbon.  
Irritating organic vapours.

## Section 6. Accidental release measures

**Personal precautions:** Avoid skin and eye contact.  
Ensure adequate ventilation.

**Environmental precautions:** Do not let product enter drains.

**Clean-up methods:** 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.

## SECTION 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.

### 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.

## Section 8. Exposure controls / personal protection

<b>Respiratory protection:</b>	Use only in well-ventilated areas. Filter type: A
<b>Hand protection:</b>	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; $\geq 0.4$ 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; $\geq 0.4$ 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.
<b>Eye protection:</b>	Wear protective glasses.
<b>Body protection:</b>	Wear suitable protective clothing.
<b>Engineering controls:</b>	No specific ventilation requirements noted, but forced ventilation may still be required if concentrations exceed occupational exposure limits.
<b>Hygienic measures:</b>	Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed.

## SECTION 9: Physical and chemical properties

<b>Appearance:</b>	pink opaque
<b>Odor:</b>	no valuation
<b>Odor threshold (CA):</b>	No data available.
<b>pH:</b>	Not applicable
<b>Melting point / freezing point:</b>	Not available.
<b>Specific gravity:</b>	1,1784
<b>Boiling point:</b>	> 150 °C (> 302 °F)
<b>Flash point:</b>	> 93,3 °C (> 199.94 °F)
<b>Evaporation rate:</b>	Not available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Lower explosive limit:</b>	No data available.
<b>Upper explosive limit:</b>	No data available.
<b>Vapor pressure:</b> (; 27 °C (80.6 °F))	< 5 mm hg
<b>Vapor density:</b>	Not available.
<b>Density:</b>	1,178 g/cm <sup>3</sup>
<b>Solubility:</b>	Solvent: Water, Slight
<b>Partition coefficient: n-octanol/water:</b>	No data available.
<b>Auto ignition:</b>	Not available.
<b>Decomposition temperature:</b>	
<b>Viscosity:</b>	No data available.
<b>VOC content:</b>	< 4 % 9,07 g/l

**Section 10. Stability and reactivity**

<b>Reactivity/Incompatible materials:</b>	Strong oxidizing agents.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	Will not occur.
<b>Conditions to avoid:</b>	Stable
<b>Hazardous decomposition products:</b>	Irritating organic vapours. carbon oxides. Sulphur oxides nitrogen oxides

**SECTION 11: Toxicological information****Information on toxicological effects**

**General toxicological information:**  
No toxicological data available.

**Inhalative toxicity:**  
Irritating to respiratory system

**Acute oral toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5	LD50	> 5.000 mg/kg	oral		rat	not specified
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	not specified
Cumene 98-82-8	LD50	2.700 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
2-phenylpropan-2-ol 617-94-7	LD50	1.300 mg/kg	oral		rat	not specified
Acetic acid, 2-phenylhydrazide 114-83-0	LD50	270 mg/kg	oral		rat	not specified

**Acute inhalative toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5	LC50	0,515 - 1 mg/l	inhalation		rat	OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)
Cumene 98-82-8	LC50	39 mg/l	inhalation	4 h	rat	not specified

**Acute dermal toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5	LD50	> 5.400 mg/kg	dermal		rat	not specified
Cumene hydroperoxide 80-15-9	LD50	1.200 - 1.520 mg/kg	dermal			not specified
Cumene 98-82-8	LD50	> 10.000 mg/kg	dermal		rabbit	not specified
2-phenylpropan-2-ol 617-94-7	LD50	4.300 mg/kg	dermal		rabbit	not specified

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
Cumene 98-82-8	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Cumene 98-82-8	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Cumene 98-82-8	not sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
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	not specified
Cumene 98-82-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro	without		OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells In Vitro)
Cumene 98-82-8	negative	inhalation: gas		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

**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	not specified
Cumene 98-82-8	NOAEL=> 535,8 mg/kg	oral: feed	28 ddaily	rat	not specified
Cumene 98-82-8	NOAEL=125 ppm	inhalation: vapour	14 w6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

**SECTION 12: Ecological information****Toxicity****Ecotoxicity:**

Toxic to aquatic organisms

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

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	EC 50	7 mg/l	Daphnia	24 h	Water flea (Daphnia magna)	
	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	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		not specified
Cumene 98-82-8	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene 98-82-8	EC50	4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene 98-82-8	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene 98-82-8	EC10	211 mg/l	Bacteria	24 h		DIN 38412, part 8 (Pseudomonas Zellvermehrungshe mm-Test)

**Persistence and degradability**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5		aerobic	0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Cumene 98-82-8		aerobic	86 %	ISO 10708 (BODIS-Test)

**Bioaccumulative potential / Mobility in soil****Mobility:**

Cured adhesives are immobile.

Hazardous components CAS-No.	LogPow	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					not specified
Cumene 98-82-8		35,5		Carassius auratus		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene 98-82-8	3,55				23 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
2-phenylpropan-2-ol 617-94-7	1,95					not specified
Acetic acid, 2-phenylhydrazide 114-83-0	0,74					not specified

**Results of PBT and vPvB assessment**

Hazardous components CAS-No.	PBT/vPvB
Cumene hydroperoxide 80-15-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Cumene 98-82-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2-phenylpropan-2-ol 617-94-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

**Section 13. Disposal considerations****Waste disposal of product:** Dispose of in accordance with local and national regulations.**Disposal for uncleaned package:** Disposal must be made according to official regulations.**Section 14. Transport information****General information:**

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



## Section 15. Regulations - classification and identification

Cumene	IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements IBC Code. International Bulk Chemical Code, Chapter 17, Minimum Requirements India. List of Hazardous Chemicals (Manufacture, Storage and Import of Hazardous Chemical Rules, Schedule I (Part II))
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No reference to national Indian legislation is to be made, as there are no hazardous ingredient present.

## 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.
- R22 Harmful if swallowed.
- R23 Toxic by inhalation.
- R34 Causes burns.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R36/38 Irritating to eyes and skin.
- R37 Irritating to respiratory system.
- R40 Limited evidence of a carcinogenic effect.
- 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.
- R65 Harmful: may cause lung damage if swallowed.
- R7 May cause fire.

### 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.

**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.**

### Disclaimer:

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