



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

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LOCTITE 2701

sds no. : 173107
V003.4

Revision: 08.07.2013
printing date: 04.01.2014

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

1.1. Product identifier

LOCTITE 2701

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 Limited

Apollo Court, 2 Bishop Square Business Park

AL10 9EY Hatfield

Great Britain

Phone: +44 (1707) 635000

Fax-no.: +44 (1707) 635099

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.

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

2.2. Label elements

Label elements (DPD):

Xi - Irritant



Risk phrases:

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

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.

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:

Hydroxypropyl methacrylate,
Methacryloyloxyethyl succinate

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Anaerobic adhesive

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 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 H314
2-Hydroxyethyl methacrylate 868-77-9	212-782-2 01-2119490169-29	>= 0,1- < 1 %	Skin irritation 2 H315 Serious eye irritation 2 H319 Skin sensitizer 1 H317
Cumene 98-82-8	202-704-5	>= 0- < 2,5 %	Flammable liquids 3 H226 Aspiration hazard 1 H304 Specific target organ toxicity - single exposure 3 H335 Chronic hazards to the aquatic environment 2 H411

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
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	>= 25 - < 50 %	Xi - Irritant; R36, R43
Methacryloyloxyethyl succinate 20882-04-6	244-096-4	>= 1 - < 5 %	Xi - Irritant; R38, R41, R43
Cumene hydroperoxide 80-15-9	201-254-7	>= 1 - < 2,5 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 O - Oxidizing; R7 C - Corrosive; R34 N - Dangerous for the environment; R51/53
2-Hydroxyethyl methacrylate 868-77-9	212-782-2 01-2119490169-29	>= 0,1 - < 1 %	Xi - Irritant; R36/38 R43
Cumene 98-82-8	202-704-5	>= 0 - < 2,5 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 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

EYE: Irritation, conjunctivitis.

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

SKIN: Rash, Urticaria.

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

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.

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 chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided

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.
Refer to Technical Data Sheet

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

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)					0,482 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	aqua (marine water)					0,482 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	STP					10 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	aqua (intermittent releases)					1 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	sediment (freshwater)					3,79 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	sediment (marine water)					3,79 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	soil					0,476 mg/kg	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-Hydroxyethyl methacrylate 868-77-9	worker	dermal	Long term exposure - systemic effects		1,3 mg/kg bw/day	
2-Hydroxyethyl methacrylate 868-77-9	worker	inhalation	Long term exposure - systemic effects		4,9 mg/m ³	
2-Hydroxyethyl methacrylate 868-77-9	general population	dermal	Long term exposure - systemic effects		0,83 mg/kg bw/day	
2-Hydroxyethyl methacrylate 868-77-9	general population	inhalation	Long term exposure - systemic effects		2,9 mg/m ³	
2-Hydroxyethyl methacrylate 868-77-9	general population	oral	Long term exposure - systemic effects		0,83 mg/kg bw/day	

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:

Avoid skin-contact.

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 green
Odor	Mild
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 149,0 °C (> 300.2 °F)
Flash point	> 100 °C (> 212 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	0,3000000 mbar

(20,0 °C (68 °F))	
Density	1,1 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)	Partially soluble
(Solvent: Water)	
Solubility (qualitative)	Miscible
(Solvent: Acetone)	
Solubility (qualitative)	emulsifiable
(Solvent: Water)	
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

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 under normal conditions of storage and use.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

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:

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.

Sensitizing:

May cause sensitization by skin contact.

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	

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	
2-Hydroxyethyl methacrylate 868-77-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

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.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Hydroxypropyl methacrylate 27813-02-1	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	
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)
2-Hydroxyethyl methacrylate 868-77-9	LC50	227 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	380 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	160 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	345 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
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: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	98 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene 98-82-8		aerobic	86 %	

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
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Hydroxypropyl methacrylate 27813-02-1	0,97					
Cumene hydroperoxide 80-15-9		9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
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)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
2-Hydroxyethyl methacrylate 868-77-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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.

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, ADNR, IMDG, IATA-DGR.
- 14.2. UN proper shipping name**
Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.
- 14.3. Transport hazard class(es)**
Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.
- 14.4. Packaging group**
Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.
- 14.5. Environmental hazards**
Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.
- 14.6. Special precautions for user**
Not hazardous according to RID, ADR, ADNR, 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:

- R10 Flammable.
- R21/22 Harmful in contact with skin and if swallowed.
- R23 Toxic by inhalation.
- R34 Causes burns.
- R36 Irritating to eyes.
- R36/38 Irritating to eyes and skin.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- 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.
- H226 Flammable liquid and vapor.
- H242 Heating may cause a fire.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- 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 its subsequent amendments, and Commission Directive 1999/45/EC.