

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

Page 1 of 16

LOCTITE 603

SDS No.: 153475 V007.0 Revision: 27.03.2015 printing date: 28.07.2015 Replaces version from: 12.02.2015

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

## 1.1. Product identifier

LOCTITE 603

#### **Contains:**

Hydroxypropyl methacrylate Acrylic acid 2,2'-Ethylenedioxydiethyl dimethacrylate Acetic acid, 2-phenylhydrazide

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

Intended use: Anaerobic Sealant

### 1.3. Details of the supplier of the safety data sheet

Henkel Limited 2 Bishop Square Business Park AL109EY Herfordshire Hatfield

Great Britain

Phone:+44 1606 593933Fax-no.:+44 1606 863762

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):

Skin corrosion/irritation	Category 2
H315 Causes skin irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

## Classification (DPD):

Xi - Irritant
R37/38 Irritating to respiratory system and skin.
Sensitizing
R43 May cause sensitisation by skin contact.
Xi - Irritant
R41 Risk of serious damage to eyes.
Dangerous for the environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	<ul> <li>H315 Causes skin irritation.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H318 Causes serious eye damage.</li> <li>H335 May cause respiratory irritation.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>
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	<ul><li>P261 Avoid breathing vapours.</li><li>P273 Avoid release to the environment.</li><li>P280 Wear protective gloves/eye protection.</li></ul>
Precautionary statement: Response	<ul> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.</li> <li>P302+P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</li> </ul>

## Label elements (DPD):

#### Xi - Irritant



## Risk phrases:

R37/38 Irritating to respiratory system and skin.

- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Safety phrases:

- S24/25 Avoid contact with skin and eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28 After contact with skin, wash immediately with plenty of water and soap.
- S37/39 Wear suitable gloves and eye/face protection.
- 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.

Contains:

Hydroxypropyl methacrylate

#### 2.3. Other hazards

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

#### General chemical description:

Anaerobic Sealant

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
4-t-Butylcyclohexyl methacrylate 46729-07-1	256-277-5	25- 50 %	STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0	10- 20 %	STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	5-< 10 %	Skin Sens. 1 H317 Eye Irrit. 2 H319
Acrylic acid 79-10-7	201-177-9 01-2119452449-31	5- < 10 %	Flam. Liq. 3 H226 Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Corr. 1A H314 Acute Tox. 4; Inhalation H332 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 2 H411
Fatty alcohol, C8, ethoxylate 9036-19-5		0,25-< 2,5 %	Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Aquatic Chronic 2 H411
Cumene hydroperoxide 80-15-9	201-254-7	0,1-< 1 %	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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	203-652-6 01-2119969287-21	0,1-< 1 %	Skin Sens. 1B H317
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	0,1-< 1%	Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Skin Corr. 1A H314
Acetic acid, 2-phenylhydrazide	204-055-3	0,1 - < 1%	Acute Tox. 3; Oral

114-83-0	H301
114-05-0	
	Skin Irrit. 2
	H315
	Skin Sens. 1
	H317
	Eye Irrit. 2
	H319
	STOT SE 3; Inhalation
	H335
	Carc. 2
	H351

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
4-t-Butylcyclohexyl methacrylate 46729-07-1	256-277-5	25 - 50 %	Xi - Irritant; R36/37/38
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0	10 - 20 %	Xi - Irritant; R36/37/38
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	5 - < 10 %	Xi - Irritant; R36, R43
Acrylic acid 79-10-7	201-177-9 01-2119452449-31	5 - < 10 %	R10 C - Corrosive; R35 N - Dangerous for the environment; R50 Xn - Harmful; R20/21/22
Fatty alcohol, C8, ethoxylate 9036-19-5		0,25 - < 2,5 %	N - Dangerous for the environment; R51/53 Xn - Harmful; R22 Xi - Irritant; R41
Cumene hydroperoxide 80-15-9	201-254-7	0,1 - < 1 %	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 - < 1 %	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.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

## 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. Sulphur oxides

#### 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 section 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 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.

#### 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.

# 7.3. Specific end use(s) Anaerobic Sealant

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## **Occupational Exposure Limits**

Valid for

Great Britain

Value type	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
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

## Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	1	1	mg/l	ppm	mg/kg	others	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (freshwater)					0,904 mg/L	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (marine water)					0,904 mg/L	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	STP					10 mg/L	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (intermittent releases)					0,972 mg/L	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	sediment (freshwater)				6,28 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	sediment (marine water)				6,28 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	soil				0,727 mg/kg		
Acrylic acid 79-10-7	aqua (freshwater)					0,003 mg/L	
Acrylic acid 79-10-7	aqua (marine water)					0,0003 mg/L	
Acrylic acid 79-10-7	aqua (intermittent releases)					0,0013 mg/L	
Acrylic acid 79-10-7	STP					0,9 mg/L	
Acrylic acid 79-10-7	sediment (freshwater)				0,0236 mg/kg		
Acrylic acid 79-10-7	sediment (marine water)				0,00236 mg/kg		
Acrylic acid 79-10-7	soil				1 mg/kg		
Acrylic acid 79-10-7	oral				0,0023 mg/kg		

## **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	Dermal	Long term exposure - systemic effects		4,2 mg/kg bw/day	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	Inhalation	Long term exposure - systemic effects		14,7 mg/m3	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	general population	Dermal	Long term exposure - systemic effects		2,5 mg/kg bw/day	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	general population	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	general population	oral	Long term exposure - systemic effects		2,5 mg/kg bw/day	
Acrylic acid 79-10-7	Workers	Inhalation	Long term exposure - local effects		30 mg/m3	
Acrylic acid 79-10-7	Workers	Inhalation	Acute/short term exposure - local effects		30 mg/m3	
Acrylic acid 79-10-7	Workers	Dermal	Acute/short term exposure - local effects		1 mg/cm2	

**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

Odor Odour threshold liquid green characteristic No data available / Not applicable

Page 10 of 16
---------------

pH	No data available / Not applicable
Initial boiling point	> 149 °C (> 300.2 °F)
Flash point	> 100,00 °C ( $> 212$ °F); Tagliabue closed cup
Decomposition temperature	No data available / Not applicable
Vapour pressure	
(27,0 °C (80.6 °F))	
Vapour pressure	< 300 mbar
(50 °C (122 °F))	
Density	1,07 g/cm3
0	-
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)	Slight
(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

Reaction with strong acids. 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

10.5. Incompatible materials

None if used properly.

## 10.6. Hazardous decomposition products

None if used for intended purpose.

## **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 I 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:

May cause irritation to the digestive tract.

## Skin irritation:

Causes skin irritation.

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.

### Eye irritation:

Causes serious eye damage.

## Sensitizing:

May cause an allergic skin reaction.

## Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 5.000 mg/kg	oral		rat	
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Acrylic acid 79-10-7	LD50	1.500 mg/kg	oral		rat	BASF Test
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	10.837 mg/kg	oral		rat	
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

## Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acrylic acid 79-10-7	LC50	> 5,1 mg/l	Vapor.	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Methacrylic acid 79-41-4	LC50	4,7 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

## Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 3.000 mg/kg	dermal		rabbit	
Hydroxypropyl methacrylate 27813-02-1	LD50	> 5.000 mg/kg	dermal		rabbit	
Acrylic acid 79-10-7	LD50	640 mg/kg	dermal		rabbit	BASF Test
Methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg	dermal			Expert judgement
Methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg			rabbit	Dermal Toxicity Screening

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	highly corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
Methacrylic acid 79-41-4	Category 1A (corrosive)	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	corrosive	21 d	rabbit	BASF Test
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	slightly irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

## **Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Acrylic acid 79-10-7	not sensitising	Skin painting test	guinea pig	
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	Buehler test

## Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Acrylic acid 79-10-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
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:**

Harmful to aquatic life with long lasting effects. Do not empty into drains / surface water / ground water.

## MSDS-No.: 153475 V007.0

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity Study	time	-	
1-Methyltrimethylene dimethacrylate 1189-08-8	LC50	32,5 mg/l	Fish	48 h		DIN 38412-15
Hydroxypropyl methacrylate 27813-02-1	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	DIN 38412-15
Acrylic acid 79-10-7	LC50	27 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	0,13 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	NOEC	19 mg/l	chronic Daphnia	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)
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
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LC50	16,4 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Methacrylic acid 79-41-4	LC50	85 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Methacrylic acid 79-41-4	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
Methacrylic acid 79-41-4	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	8,2 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

## 12.2. Persistence and degradability

# **Persistence and Biodegradability:** No data available for the product.

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

## MSDS-No.: 153475 LOCTITE 603 V007.0

Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable		85 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

## 12.3. Bioaccumulative potential / 12.4. Mobility in soil

## Mobility:

Cured adhesives are immobile.

## **Bioaccumulative potential:**

No data available for the product.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Hydroxypropyl methacrylate 27813-02-1	0,97					
Acrylic acid 79-10-7 Acrylic acid 79-10-7	0,46	3,16			25 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Cumene hydroperoxide 80-15-9 Cumene hydroperoxide 80-15-9	2,16	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	1,88					
Methacrylic acid 79-41-4	0,93				22 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74					

## 12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Hydroxypropyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
27813-02-1	Bioaccumulative (vPvB) criteria.
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
2,2'-Ethylenedioxydiethyl dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
109-16-0	Bioaccumulative (vPvB) criteria.
Methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.

## **12.6.** Other adverse effects

No data available.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### Product disposal:

Do not empty into drains / surface water / ground water. 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, 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 (1999/13/EC) < 3 %

## 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. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R21/22 Harmful in contact with skin and if swallowed. R22 Harmful if swallowed. R23 Toxic by inhalation. R34 Causes burns. R35 Causes severe burns. R36 Irritating to eyes. R36/37/38 Irritating to eyes, respiratory system and skin. R37 Irritating to respiratory system. 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. R50 Very toxic to aquatic organisms. 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. 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. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. 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.

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.