# **Contact Sheet**



## **Europe**



Austria

Tel: +43 4212 6400 Sparex Austria Muraunberger Str Hurzendorf 9300



France

Tel: +33 2987 89234 Sparex S.A.R.L. Zae De Ty Douar Commana 29450





Italy

Tel: + 43 4212 6400 Sparex Austria Muraunberger Str Hurzendorf 9300



**Portugal** 

Tel: +351 261 311107 Sparex Portugal, Importação e Comércio de Peças,Lda. Lugar da Espera 2565-716 Runa.



Belgium / Lux

Tel: + 32 58235140 Sparex Belgium Bvba Toevluchtweg 9 B-8620 Nieuwpoort



Germany

Tel: + 49 4282 93100 Sparex Germany Hansestrasse 03 Sittensen 27419



Netherlands

Tel: + 31 235 841 020 Sparex Holland BV Luzernestraat 19N 2153 GM Nieuw-Vennep



Spain

Tel: + 349 451 33524 Sparex Agrirepuestos, S.L. C/Jose Maria Iparraguirre No.15 B 01006 Vitoria-Gasteiz (Alava)





Denmark

Tel: + 45 647 22287 Sparex Denmark Sparex Limited ApS Messevej 1 9600 Aars





Ireland

Tel: +353 51 855592 Sparex (Tractor Accessories) Ltd Grannagh Waterford Ireland



Poland

Tel: +48 61 816 19 37 61-168 ul. Rataje 164, Poznań



Tel: +44 1392 441338 Sparex Limited **Exeter Airport Devon** Exeter EX5 2LJ

## **North America**





Canada

Tel: + 905 786 277 Sparex Canada Highway No. 2 On Newcastle L1b 119



USA

Tel: + 1 330 562 8150 Sparex US PO Box 510 Aurora, OH 44202

## **Africa**



South Africa

Cape - Tel: +27 00 21 887 3575 . KZN - Tel: + 27 31 573 1240 Cape branch

35 George Blake St, Plankenburg Stellenbosch 7600

KZN branch 59 Marseilles crescent Briardene Durban 4001

## Australasia



Australia

Tel: + 61 298 205 777 Sparex Australia Pty Ltd 81-83 Strzelecki Avenue, Sunshine West, VIC 3020



New Zealand

Tel: + 64 9634 4121 4 Princes Street Onehunga, Auckland 1345

## **Sparex Export Markets**



Export

Tel: +44 1392 441314 Sparex Limited **Exeter Airport** Devon Exeter EX5 2LJ



**LOCTITE 603** 

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

Page 1 of 21

SDS No.: 153475

V012.0

Revision: 11.09.2018

printing date: 12.09.2018

Replaces version from: 30.04.2018

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

#### 1.1. Product identifier

LOCTITE 603

#### 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 Ltd Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.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.

## 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Contains 1-Methyltrimethylene dimethacrylate

Hydroxypropyl methacrylate

Acrylic acid

2,2'-Ethylenedioxydiethyl dimethacrylate

Acetic acid, 2-phenylhydrazide

Signal word: Danger

**Hazard statement:** H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

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:** P261 Avoid breathing vapors.

**Prevention** P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection.

**Precautionary statement:** P302+P352 IF ON SKIN: Wash with plenty of soap and water.

**Response** P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

#### 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.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

## **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 01-2119969461-31	10- 20 %	Skin Sens. 1B H317
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 %	STOT SE 3 H335 Aquatic Chronic 2 H411 Aquatic Acute 1 H400 Acute Tox. 4; Inhalation H332 Acute Tox. 4; Oral H302 Flam. Liq. 3 H226 Skin Corr. 1A H314 Acute Tox. 4; Dermal H312
Octylphenol ethoxylate 9036-19-5		1-< 3 %	Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Aquatic Chronic 2 H411 ===== EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)
Cumene hydroperoxide 80-15-9	201-254-7 01-2119475796-19	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 Aquatic Chronic 2 H411 Skin Corr. 1B H314
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 H302 Acute Tox. 3 H311 Acute Tox. 4 H332 Skin Corr. 1A H314 Eye Dam. 1 H318 STOT SE 3 H335
Acetic acid, 2-phenylhydrazide 114-83-0	204-055-3	0,1-< 1 %	Acute Tox. 3; Oral H301 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.

## **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.

Eve 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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

#### 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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released. 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 contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

#### 6.2. Environmental precautions

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

#### 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.

Dispose of contaminated material as waste according to Section 13.

#### **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.

See advice in section 8

#### 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

Refer to Technical Data Sheet

#### 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

Ingredient [Regulated substance]	ppm	mg/m³	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

## **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit	Regulatory list
				category / Remarks	
Acrylic acid 79-10-7 [ACRYLIC ACID]	2	6	Time Weighted Average (TWA):		IR_OEL
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	10	29	Time Weighted Average (TWA):	Indicative	ECTLV
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	20	59	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	70	Time Weighted Average (TWA):		IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	140	Short Term Exposure Limit (STEL):		IR_OEL

## $\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	Сотратолист	Perrou	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	sewage treatment plant (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 Acrylic acid	aqua (marine water) aqua		0,0003 mg/l 0,0013				
79-10-7 Acrylic acid	(intermittent releases) sewage		mg/l 0,9 mg/l				
79-10-7	treatment plant (STP)		0,9 mg/1				
Acrylic acid 79-10-7 Acrylic acid	sediment (freshwater)				0,0236 mg/kg 0,00236		
79-10-7 Acrylic acid	(marine water) Soil				mg/kg 1 mg/kg		
79-10-7 Acrylic acid 79-10-7	oral				0,03 g/kg		
Acrylic acid 79-10-7 Acrylic acid	Predator				0,03 g/kg		
79-10-7 .alpha.,.alphaDimethylbenzyl	Air		0,0031				
hydroperoxide 80-15-9 .alpha,,,alpha,-Dimethylbenzyl	(freshwater) aqua (marine		mg/l 0,00031				
hydroperoxide 80-15-9	water)		mg/l				
.alpha.,.alpha.,-Dimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Sewage treatment plant		0,35 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Soil				0,0029 mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	aqua (freshwater)		0,164 mg/l				
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (marine water) sewage		0,0164 mg/l 10 mg/l				

109-16-0	treatment plant (STP)			
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	aqua (intermittent releases)	0,164 mg/l		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sediment (freshwater)		1,85 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sediment (marine water)		0,185 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Soil		0,274 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Air			
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Predator			
Methacrylic acid 79-41-4	aqua (freshwater)	0,82 mg/l		
Methacrylic acid 79-41-4	aqua (marine water)	0,82 mg/l		
Methacrylic acid 79-41-4	sewage treatment plant (STP)	10 mg/l		
Methacrylic acid 79-41-4	aqua (intermittent releases)	0,82 mg/l		
Methacrylic acid 79-41-4	Soil		1,2 mg/kg	

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
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	
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	
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	
Acrylic acid 79-10-7	General population	dermal	Acute/short term exposure - local effects		1 mg/cm2	
Acrylic acid 79-10-7	General population	inhalation	Acute/short term exposure - local effects		3,6 mg/m3	
Acrylic acid 79-10-7	General population	inhalation	Long term exposure - local effects		3,6 mg/m3	
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	inhalation	Long term exposure - systemic effects		48,5 mg/m3	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
2.2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	dermal	Long term exposure - systemic effects		8,33 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	oral	Long term exposure - systemic effects		8,33 mg/kg	
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - local effects		88 mg/m3	
Methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects		29,6 mg/m3	
Methacrylic acid 79-41-4	Workers	dermal	Long term exposure - systemic effects		4,25 mg/kg	
Methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - local effects		6,55 mg/m3	
Methacrylic acid 79-41-4	General population	Inhalation	Long term exposure -		6,3 mg/m3	

		systemic effects		
Methacrylic acid 79-41-4	General population	Long term exposure - systemic effects	2,55 mg/kg	

#### **Biological Exposure Indices:**

None

#### 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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 (EN 14387)

#### 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;  $\geq$ = 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.

#### Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

#### Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance liquid green
Odor characteristic

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Melting point No data available / Not applicable
Solidification temperature No data available / Not applicable

Initial boiling point > 149 °C (> 300.2 °F)

Flash point > 100,00 °C (> 212 °F); Tagliabue closed cup

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable

Vapour pressure

 $(27,0~^{\circ}\text{C}~(80.6~^{\circ}\text{F}))$ Vapour pressure

(50 °C (122 °F))

Relative vapour density:

Density ()

Bulk density Solubility

Solubility (qualitative)

(Solvent: Water)

Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Viscosity (kinematic) Explosive properties Oxidising properties

9.2. Other information

No data available / Not applicable

#### < 300 mbar

No data available / Not applicable

1,07 g/cm3

No data available / Not applicable No data available / Not applicable

No data available / Not applicable No data available / Not applicable No data available / Not applicable No data available / Not applicable No data available / Not applicable No data available / Not applicable 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 under normal conditions of storage and use.

#### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

None if used for intended purpose.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
4-t-Butylcyclohexyl methacrylate 46729-07-1	LD50	> 2.000 mg/kg	rat	not specified
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 5.000 mg/kg	rat	not specified
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Acrylic acid 79-10-7	LD50	1.500 mg/kg	rat	BASF Test
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	rat	not specified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	10.837 mg/kg	rat	not specified
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	270 mg/kg	rat	not specified

## Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 3.000 mg/kg	rabbit	not specified
Hydroxypropyl methacrylate 27813-02-1	LD50	> 5.000 mg/kg	rabbit	not specified
Acrylic acid 79-10-7	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
Acrylic acid 79-10-7	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Octylphenol ethoxylate 9036-19-5	LD50	> 3.000 mg/kg	rabbit	not specified
Cumene hydroperoxide 80-15-9	LD50	1.200 - 1.520 mg/kg		not specified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	> 2.000 mg/kg	mouse	not specified
Methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening

## Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Acrylic acid	LC50	> 5,1 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute
79-10-7						Inhalation Toxicity)
Acrylic acid	Acute	11 mg/l	vapour			Expert judgement
79-10-7	toxicity					
	estimate					
	(ATE)					
Methacrylic acid	LC50	> 3,6 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
79-41-4						Inhalation Toxicity)

#### Skin corrosion/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.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydroxypropyl methacrylate 27813-02-1	not irritating	24 h	rabbit	Draize Test
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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating	24 h	rabbit	Draize Test
Methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

## Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances 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	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Methacrylic acid 79-41-4	corrosive		rabbit	Draize Test

## Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
1-Methyltrimethylene	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
dimethacrylate		assay (LLNA)		Local Lymph Node Assay)
1189-08-8				
Acrylic acid	not sensitising	Skin painting test	guinea pig	not specified
79-10-7				
2,2'-Ethylenedioxydiethyl	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
dimethacrylate		assay (LLNA)		Local Lymph Node Assay)
109-16-0				
Methacrylic acid	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
79-41-4				

## Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Hydroxypropyl methacrylate 27813-02-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydroxypropyl methacrylate 27813-02-1	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	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 hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
Methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

## Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components	Result	Route of	Exposure	Species	Sex	Method
CAS-No.		application	time /			
			Frequency			
			of treatment			
Hydroxypropyl	not carcinogenic	inhalation	2 years (102	rat	male	OECD Guideline 451
methacrylate			weeks)			(Carcinogenicity
27813-02-1			6 hours/day,			Studies)
			5 days/week			
Acrylic acid		oral: drinking	26 (males) -	rat	male/female	OECD Guideline 451
79-10-7		water	28 (females)			(Carcinogenicity
			month			Studies)
			continuously			
Methacrylic acid	not carcinogenic	inhalation	2 y	mouse	male/female	OECD Guideline 451
79-41-4						(Carcinogenicity
						Studies)

## Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Hydroxypropyl methacrylate 27813-02-1	NOAEL P 400 mg/kg	two- generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
Acrylic acid 79-10-7	NOAEL P 240 mg/kg NOAEL F2 53 mg/l		oral: drinking water	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL P 1.000 mg/kg NOAEL F1 1.000 mg/kg		oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Methacrylic acid 79-41-4	NOAEL P 50 mg/kg NOAEL F1 400 mg/kg NOAEL F2 400 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

## STOT-single exposure:

No data available.

## STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Hydroxypropyl methacrylate 27813-02-1	NOAEL 300 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL 1.000 mg/kg	oral: gavage	daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

## Aspiration hazard:

No data available.

## **SECTION 12: Ecological information**

## General ecological information:

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

## 12.1. Toxicity

## **Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
1-Methyltrimethylene dimethacrylate 1189-08-8	LC50	32,5 mg/l	48 h		DIN 38412-15
Hydroxypropyl methacrylate 27813-02-1	LC50	493 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
Acrylic acid 79-10-7	LC50	27 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Octylphenol ethoxylate 9036-19-5	LC50	1,5 mg/l	48 h	Ide, silver or golden orfe (Leuciscus idus)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LC50	16,4 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Methacrylic acid 79-41-4	LC50	85 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)

## Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydroxypropyl methacrylate	EC50	> 143 mg/l	48 h	Daphnia magna	OECD Guideline 202
27813-02-1					(Daphnia sp. Acute
					Immobilisation Test)
Acrylic acid	EC50	95 mg/l	48 h	Daphnia magna	EPA OTS 797.1300
79-10-7					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)
Octylphenol ethoxylate	EC50	18 - 26 mg/l	48 h	Daphnia magna	not specified
9036-19-5					
Cumene hydroperoxide	EC50	18 mg/l	48 h	Daphnia magna	OECD Guideline 202
80-15-9					(Daphnia sp. Acute
					Immobilisation Test)
Methacrylic acid	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS 797.1300
79-41-4					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)

#### Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	5,09 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	45,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Acrylic acid 79-10-7	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOEC	32 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

## Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		-		
1-Methyltrimethylene dimethacrylate 1189-08-8	EC50	9,79 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	2,11 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	EC50	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Acrylic acid 79-10-7	EC50	0,13 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	EC50	> 100 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOEC	18,6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid 79-41-4	NOEC	8,2 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid 79-41-4	EC50	45 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

## Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
1-Methyltrimethylene	NOEC	20 mg/l	28 d	activated sludge, domestic	not specified
dimethacrylate					
1189-08-8					
Hydroxypropyl methacrylate	EC10	1.140 mg/l	16 h		not specified
27813-02-1					
Acrylic acid	EC20	900 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for
79-10-7					Inhibition of Oxygen
					Consumption by Activated
					Sludge)
Cumene hydroperoxide	EC10	70 mg/l	30 min		not specified
80-15-9					
Methacrylic acid	EC10	100 mg/l	17 h		not specified
79-41-4					

## 12.2. Persistence and degradability

No data available for the product.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
1-Methyltrimethylene dimethacrylate 1189-08-8	readily biodegradable	aerobic	84 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	28 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Acrylic acid 79-10-7	inherently biodegradable	aerobic	100 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Cumene hydroperoxide 80-15-9		no data	0 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	14 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

## 12.3. Bioaccumulative potential

No data available for the product.

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Acrylic acid 79-10-7	3,16				QSAR (Quantitative Structure Activity Relationship)
Cumene hydroperoxide 80-15-9	9,1			calculation	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

## 12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Hydroxypropyl methacrylate 27813-02-1	0,97	20 °C	not specified
Acrylic acid 79-10-7	0,46	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Cumene hydroperoxide 80-15-9	2,16		not specified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	2,3		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
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		not specified

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB		
CAS-No.			
4-t-Butylcyclohexyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
46729-07-1	Bioaccumulative (vPvB) criteria.		
1-Methyltrimethylene dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
1189-08-8	Bioaccumulative (vPvB) criteria.		
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.		
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
80-15-9	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:

Dispose of in accordance with local and national regulations.

Collection and delivery to recycling enterprise or other registered elimination institution.

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

## **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. Packing 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 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 % (2010/75/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:

- 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 Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.