

**LOCTITE AA 317** 

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

Page 1 of 23

SDS No.: 173124 V009.0

Revision: 09.08.2021

printing date: 11.08.2021

Replaces version from: 07.01.2021

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

#### 1.1. Product identifier

LOCTITE AA 317

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

Intended use:

Adhesive

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

Henkel Ltd Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

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

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.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 irritation Category 2

H315 Causes skin irritation.

Serious eye damage Category 1

H318 Causes serious eye damage.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

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 Hydroxypropyl methacrylate

Acrylic acid

2,2'-Ethylenedioxydiethyl dimethacrylate

2-Hydroxyethyl methacrylate

Signal word: Danger

**Hazard statement:** H318 Causes serious eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. 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

contents/container in accordance with national regulation.\*\*\*

**Precautionary statement:** P261 Avoid breathing vapors.

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

P280 Wear protective gloves/eye protection.

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

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

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

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. None if used properly.

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

#### 3.2. Mixtures

#### **General chemical description:**

Methacrylate resin based product containing Acrylic Acid

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	25- 50 %	Skin Sens. 1 H317
27013 02 1	01 211)490220 37		Eye Irrit. 2 H319
Acrylic acid	201-177-9	5-< 10 %	Acute Tox. 4; Dermal
79-10-7	01-2119452449-31		H312 Skin Corr. 1A
			H314
			Flam. Liq. 3 H226
			Acute Tox. 4; Oral
			H302 Acute Tox. 4; Inhalation
			H332
			Aquatic Acute 1 H400
			Aquatic Chronic 2 H411
			STOT SE 3
			H335
2,2'-Ethylenedioxydiethyl dimethacrylate	203-652-6	1-< 5 %	Skin Sens. 1B
109-16-0	01-2119969287-21		Н317
Cumene hydroperoxide 80-15-9	201-254-7 01-2119475796-19	1-< 3 %	STOT RE 2 H373
00.13-7	07 211) 473770-19		Skin Corr. 1B H314
			Acute Tox. 2; Inhalation
			H330 Aquatic Chronic 2
			H411 Acute Tox. 4; Oral
			H302 Acute Tox. 4; Dermal
			H312
			Org. Perox. E H242
methacrylic acid 79-41-4	201-204-4 01-2119463884-26	1-< 3 %	Acute Tox. 4; Oral H302
			Acute Tox. 3; Dermal H311
			Acute Tox. 4; Inhalation
			H332 Skin Corr. 1A
			H314 Eye Dam. 1
			H318
			STOT SE 3 H335
Tributyl amine 102-82-9	203-058-7 01-2119474898-14	0,1-< 1 %	Acute Tox. 4; Oral H302
102 02 7	31 2117474070-14		Acute Tox. 2; Dermal
			H310 Skin Irrit. 2
			H315
			Acute Tox. 1; Inhalation H330
2-Hydroxyethyl methacrylate 868-77-9	212-782-2 01-2119490169-29	0,1-< 1 %	Skin Irrit. 2 H315
	-		Skin Sens. 1 H317
			Eye Irrit. 2
p-benzoquinone	203-405-2	0,01-< 0,1 %	H319 Acute Tox. 3; Inhalation
106-51-4	01-2119933861-35		H331 Acute Tox. 3; Oral
			H301 Eye Irrit. 2
			H319
			STOT SE 3 H335
			Skin Irrit. 2

	H315
	Aquatic Acute 1
	H400
	M factor (Acute Aquat Tox): 10

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.

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

SKIN: Rash, Urticaria.

SKIN: Redness, inflammation.

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, water spray jet, fine water spray

### Extinguishing media which must not be used for safety reasons:

High pressure waterjet

# 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.

### 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**

# ${\bf 6.1. \, Personal \, precautions, \, protective \, equipment \, and \, emergency \, procedures}$

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.

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

# 7.2. Conditions for safe storage, including any incompatibilities

Refer to Technical Data Sheet

#### 7.3. Specific end use(s)

Adhesive

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
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
Acrylic acid 79-10-7 [ACRYLIC ACID]	10	29	Time Weighted Average (TWA):		EH40 WEL
Acrylic acid 79-10-7 [Acrylic acid]	20	59	Short Term Exposure Limit (STEL):	1 minute	EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
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
Acrylic acid 79-10-7 [ACRYLIC ACID]	20	59	Short Term Exposure Limit (STEL):	1 minute Indicative OELV	IR_OEL
Acrylic acid 79-10-7 [ACRYLIC ACID]	10	29	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
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):	15 minutes	IR_OEL
p-Benzoquinone 106-51-4 [QUINONE]	0,1	0,4	Time Weighted Average (TWA):		IR_OEL

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	- Comparement	Periou	mg/l	ppm	mg/kg	others	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (freshwater)		0,904 mg/l	FF			
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 Acrylic acid	aqua (freshwater) aqua (marine		0,003 mg/l				
79-10-7 Acrylic acid	water)		mg/l 0,0013				
79-10-7	(intermittent releases)		mg/l				
Acrylic acid 79-10-7	sewage treatment plant (STP)		0,9 mg/l				
Acrylic acid 79-10-7	sediment (freshwater)				0,0236 mg/kg		
Acrylic acid 79-10-7 Acrylic acid	sediment (marine water)				0,00236 mg/kg 1 mg/kg		
79-10-7 Acrylic acid	oral				0,03 g/kg		
79-10-7 Acrylic acid 79-10-7	Predator				0,03 g/kg		
Acrylic acid 79-10-7	Air						no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (freshwater) aqua (marine		0,164 mg/l				
109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	water) sewage		mg/l 10 mg/l				
109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	treatment plant (STP)		0,164 mg/l				
109-16-0	(intermittent releases)		0,104 Hig/I				
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	sediment (freshwater)				1,85 mg/kg 0,185		
109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	(marine water) Soil				mg/kg 0,274		
109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Air				mg/kg		no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Predator						no potential for bioaccumulation
.alpha.,.alpha.,-Dimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)		0,0031 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				

.alpha.,.alphaDimethylbenzyl     aqua (intermittent releases)     0,031 mg/l       .alpha.,.alphaDimethylbenzyl     Sewage treatment plant     0,35 mg/l       bydroperoxide     treatment plant     0,023 mg/l       alpha.,.alphaDimethylbenzyl     sediment (freshwater)     0,023 mg/kg       bydroperoxide     mg/kg     0,0023 mg/kg       alpha.,.alphaDimethylbenzyl     sediment mg/kg     0,0023 mg/kg       bydroperoxide     mg/kg     0,0023 mg/kg       80-15-9     mg/kg     0,0023 mg/kg       alpha.,.alphaDimethylbenzyl     sediment mg/kg     0,0029       alpha.,.alphaDimethylbenzyl     Soil     0,0029	
R0-15-9   releases	
.alpha.,.alphaDimethylbenzyl     Sewage treatment plant     0,35 mg/l       bydroperoxide     wediment (freshwater)     0,023 mg/kg       alpha.,.alphaDimethylbenzyl     sediment (freshwater)     mg/kg       80-15-9     sediment (marine water)     0,0023 mg/kg	
hydroperoxide 80-15-9  .alpha.,.alphaDimethylbenzyl sediment (freshwater)  .alpha.,.alphaDimethylbenzyl sediment (freshwater)  .alpha.,.alphaDimethylbenzyl sediment (marine water)  .alpha.,.alphaDimethylbenzyl sediment (marine water)  .alpha.,.alphaDimethylbenzyl sediment (marine water)	
80-15-9       .alpha.,alphaDimethylbenzyl       sediment       0,023         hydroperoxide       (freshwater)       mg/kg         80-15-9       .alpha.,alphaDimethylbenzyl       sediment       0,0023         hydroperoxide       (marine water)       mg/kg	
.alpha.,.alphaDimethylbenzyl     sediment     0,023       hydroperoxide     (freshwater)     mg/kg       80-15-9     sediment     0,0023       .alpha.,.alphaDimethylbenzyl     sediment     0,0023       hydroperoxide     (marine water)     mg/kg	
hydroperoxide (freshwater) mg/kg 80-15-9  .alpha.,.alphaDimethylbenzyl sediment (marine water) mg/kg  80-15-9	
80-15-9  .alpha.,.alphaDimethylbenzyl sediment 0,0023 hydroperoxide (marine water) mg/kg	
.alpha.,.alphaDimethylbenzyl sediment 0,0023 hydroperoxide (marine water) mg/kg	
hydroperoxide (marine water) mg/kg	
.alpha.,.alphaDimethylbenzyl Soil 0,0029	
hydroperoxide mg/kg	
80-15-9	
methacrylic acid aqua 0,82 mg/l	
79-41-4 (freshwater)	
methacrylic acid aqua (marine 0,82 mg/l	
79-41-4 water)	
methacrylic acid sewage 10 mg/l	
79-41-4 treatment plant	
(STP) methacrylic acid aqua 0,82 mg/l	
methacrylic acid aqua 0,82 mg/l 79-41-4 (intermittent	
releases)	
methacrylic acid Soil 1,2 mg/kg	
79-41-4	
Tributyl amine aqua 0,008 mg/l	
102-82-9 (freshwater)	
Tributyl amine aqua (marine 0,0008	
102-82-9   water)   mg/l	
Tributyl amine aqua 0,08 mg/l	
102-82-9 (intermittent	
releases)	
Tributyl amine sewage 100 mg/l	
102-82-9 treatment plant	
(STP)	
Tributyl amine sediment 35,85	
102-82-9 (freshwater) mg/kg	
Tributyl amine sediment 3,59 mg/kg	
102-82-9 (marine water)	
Tributyl amine Soil 7,17 mg/kg	
102-82-9	
2-Hydroxyethyl methacrylate aqua (9,482 mg/l (freshwater)	
868-77-9         (freshwater)           2-Hydroxyethyl methacrylate         aqua (marine         0,482 mg/l	
868-77-9 water)	
2-Hydroxyethyl methacrylate sewage 10 mg/l	
868-77-9 treatment plant	
(STP)	
2-Hydroxyethyl methacrylate aqua 1 mg/l	
868-77-9 (intermittent	
releases)	
2-Hydroxyethyl methacrylate sediment 3,79 mg/kg	
868-77-9 (freshwater)	
2-Hydroxyethyl methacrylate sediment 3,79 mg/kg	
868-77-9 (marine water)	
2-Hydroxyethyl methacrylate Soil 0,476	
868-77-9 mg/kg	
2-Hydroxyethyl methacrylate Predator no potential f	or
868-77-9 bioaccumula	tion

# **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	
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	no hazard identified
Acrylic acid 79-10-7	Workers	inhalation	Acute/short term exposure - local effects		30 mg/m3	no hazard identified
Acrylic acid 79-10-7	Workers	dermal	Acute/short term exposure - local effects		1 mg/cm2	no hazard identified
Acrylic acid 79-10-7	General population	dermal	Acute/short term exposure - local effects		1 mg/cm2	no hazard identified
Acrylic acid 79-10-7	General population	inhalation	Acute/short term exposure - local effects		3,6 mg/m3	no hazard identified
Acrylic acid 79-10-7	General population	inhalation	Long term exposure - local effects		3,6 mg/m3	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	inhalation	Long term exposure - systemic effects		48,5 mg/m3	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	inhalation	Long term exposure - systemic effects		14,5 mg/m3	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	dermal	Long term exposure - systemic effects		8,33 mg/kg	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	oral	Long term exposure - systemic effects		8,33 mg/kg	no hazard identified
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
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 - systemic effects		6,3 mg/m3	
methacrylic acid 79-41-4	General population	dermal	Long term exposure - systemic effects		2,55 mg/kg	
Tributyl amine 102-82-9	Workers	inhalation	Long term exposure -		15,2 mg/m3	

1		1	systemic effects		
Tributyl amine 102-82-9	Workers	inhalation	Long term exposure - local effects	15,2 mg/m3	
Tributyl amine 102-82-9	Workers	inhalation	Acute/short term exposure - local effects	15,2 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	Workers	dermal	Long term exposure - systemic effects	1,3 mg/kg	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	Workers	Inhalation	Long term exposure - systemic effects	4,9 mg/m3	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	dermal	Long term exposure - systemic effects	0,83 mg/kg	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	Inhalation	Long term exposure - systemic effects	2,9 mg/m3	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	oral	Long term exposure - systemic effects	0,83 mg/kg	no potential for bioaccumulation

#### **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; >= 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

liquid

Light amber, clear

Odour threshold No data available / Not applicable

pH Not applicable, Mixture reacts with water.

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 °C (> 212 °F)

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

Vapour pressure < 4 mbar

(20 °C (68 °F))

Relative vapour density: No data available / Not applicable

Density 1,1 g/cm<sup>3</sup>

()

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Not miscible

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

Viscosity

Viscosity

No data available / Not applicable
Explosive properties

No data available / Not applicable
Oxidising properties

No data available / Not applicable
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. Reaction with strong bases

#### 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

See section reactivity.

### 10.6. Hazardous decomposition products

carbon oxides.

# **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
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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	10.837 mg/kg	rat	not specified
Cumene hydroperoxide 80-15-9	LD50	382 mg/kg	rat	other guideline:
methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Tributyl amine 102-82-9	LD50	420 mg/kg	rat	not specified
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rat	not specified
p-benzoquinone 106-51-4	LD50	130 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	Value	Value	Species	Method
CAS-No.	type			
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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	> 2.000 mg/kg	mouse	not specified
Cumene hydroperoxide 80-15-9	LD50	530 - 1.060 mg/kg	rat	other guideline:
Cumene hydroperoxide 80-15-9	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening
methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg		Expert judgement
Tributyl amine 102-82-9	LD50	195 mg/kg	rabbit	not specified
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rabbit	not specified
p-benzoquinone 106-51-4	LD50	> 2.000 mg/kg	rat	not specified

# 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	LC0	5,1 mg/l	vapour	4 h	rat	equivalent or similar to OECD
79-10-7						Guideline 403 (Acute
						Inhalation Toxicity)
Acrylic acid	Acute	11 mg/l	vapour			Expert judgement
79-10-7	toxicity					
	estimate					
	(ATE)					
Cumene hydroperoxide	LC50	1,370 mg/l	vapour	4 h	rat	not specified
80-15-9						
methacrylic acid	LC50	> 3,6  mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
79-41-4						Inhalation Toxicity)
methacrylic acid	Acute	3,61 mg/l				Expert judgement
79-41-4	toxicity					
	estimate					
	(ATE)					
Tributyl amine	LC50	0,5 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute
102-82-9						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)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating	24 h	rabbit	Draize Test
Cumene hydroperoxide 80-15-9	corrosive		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
Hydroxypropyl methacrylate 27813-02-1	irritating		rabbit	Draize Test
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
2-Hydroxyethyl methacrylate 868-77-9	irritating		rabbit	Draize Test

# ${\bf Respiratory\ or\ skin\ sensitization:}$

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.				
Hydroxypropyl	sensitising	Guinea pig maximisation	guinea pig	not specified
methacrylate		test		
27813-02-1				
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	equivalent or similar to OECD Guideline
79-41-4				406 (Skin Sensitisation)
2-Hydroxyethyl	sensitising	Guinea pig maximisation	guinea pig	not specified
methacrylate		test		
868-77-9				

# 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)
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)
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
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)
2-Hydroxyethyl methacrylate 868-77-9	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)

# Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Hydroxypropyl methacrylate 27813-02-1	not carcinogenic	inhalation	2 years (102 weeks) 6 hours/day, 5 days/week	rat	male	OECD Guideline 451 (Carcinogenicity Studies)
Acrylic acid 79-10-7		oral: drinking water	26 (males) - 28 (females) month continuously	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
methacrylic acid 79-41-4	not carcinogenic	inhalation	2 y	mouse	male/female	OECD Guideline 451 (Carcinogenicity Studies)
2-Hydroxyethyl methacrylate 868-77-9		inhalation	102 weeks 6 hours/day, 5 days/week	rat	female	OECD Guideline 451 (Carcinogenicity Studies)

# Reproductive toxicity:

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

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Hydroxypropyl	NOAEL P 400 mg/kg	two-	oral: gavage	rat	OECD Guideline 416 (Two-
methacrylate		generation			Generation Reproduction
27813-02-1		study			Toxicity Study)
Acrylic acid	NOAEL P 240 mg/kg		oral:	rat	OECD Guideline 416 (Two-
79-10-7	NOAEL F2 53 mg/l		drinking		Generation Reproduction
			water		Toxicity Study)
2,2'-Ethylenedioxydiethyl	NOAEL P 1.000 mg/kg		oral: gavage	rat	OECD Guideline 422
dimethacrylate					(Combined Repeated Dose
109-16-0	NOAEL F1 1.000 mg/kg				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)
methacrylic acid	NOAEL P 50 mg/kg	Two	oral: gavage	rat	OECD Guideline 416 (Two-
79-41-4	NO.157 54 400 4	generation			Generation Reproduction
	NOAEL F1 400 mg/kg	study			Toxicity Study)
	NO 4 EL E2 400 /				
	NOAEL F2 400 mg/kg				
2-Hydroxyethyl	NOAEL P >= 1.000 mg/kg	screening	oral: gavage	rat	OECD Combined Repeated
methacrylate					Dose and Reproductive /
868-77-9	NOAEL F1 $>= 1.000 \text{ mg/kg}$				Developmental Toxicity
					Screening Test (Precursor
					Protocol of GL 422)

# 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)
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)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
methacrylic acid 79-41-4		inhalation	90 d 6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL 100 mg/kg	oral: gavage	once 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		_		
Hydroxypropyl methacrylate	LC50	493 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
27813-02-1	7.070	27 "	0.41		ED 1 0EG 505 1 100 (E' 1
Acrylic acid	LC50	27 mg/l	96 h	Salmo gairdneri (new name:	EPA OTS 797.1400 (Fish
79-10-7				Oncorhynchus mykiss)	Acute Toxicity Test)
2,2'-Ethylenedioxydiethyl	LC50	16,4 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
dimethacrylate					Acute Toxicity Test)
109-16-0					•
Cumene hydroperoxide	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
80-15-9					Acute Toxicity Test)
methacrylic acid	LC50	85 mg/l	96 h	Salmo gairdneri (new name:	EPA OTS 797.1400 (Fish
79-41-4				Oncorhynchus mykiss)	Acute Toxicity Test)
Tributyl amine	LC50	60,2 mg/l	48 h	Leuciscus idus	DIN 38412-15
102-82-9					
2-Hydroxyethyl methacrylate	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish,
868-77-9					Acute Toxicity Test)
p-benzoquinone	LC50	0,04 - 0,125 mg/l	96 h	Oncorhynchus mykiss	not specified
106-51-4				•	_

### 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)
Cumene hydroperoxide	EC50	18,84 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)
Tributyl amine	EC50	8 mg/l	48 h	Daphnia magna	OECD Guideline 202
102-82-9					(Daphnia sp. Acute
					Immobilisation Test)
2-Hydroxyethyl methacrylate	EC50	380 mg/l	48 h	Daphnia magna	OECD Guideline 202
868-77-9					(Daphnia sp. Acute
					Immobilisation Test)
p-benzoquinone	EC50	0,13 mg/l	48 h	Daphnia magna	OECD Guideline 202
106-51-4					(Daphnia sp. Acute
					Immobilisation Test)

### 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				
Hydroxypropyl methacrylate	NOEC	45,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
27813-02-1					magna, Reproduction Test)
Acrylic acid	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330
79-10-7					(Daphnid Chronic Toxicity
					Test)
2,2'-Ethylenedioxydiethyl	NOEC	32 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia

dimethacrylate 109-16-0					magna, Reproduction Test)
2-Hydroxyethyl methacrylate	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
868-77-9					magna, Reproduction Test)

**Toxicity (Algae):** 

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
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)
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)
Cumene hydroperoxide 80-15-9	EC50	3,1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	NOEC	1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	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)
Tributyl amine 102-82-9	EC10	1,378 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tributyl amine 102-82-9	EC50	8,215 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	836 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	400 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
p-benzoquinone 106-51-4	EC50	1,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	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	
Hydroxypropyl methacrylate 27813-02-1	EC10	1.140 mg/l	16 h		not specified
Acrylic acid 79-10-7	EC20	900 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	30 min		not specified
methacrylic acid 79-41-4	EC10	100 mg/l	17 h		not specified
Tributyl amine 102-82-9	EC0	> 800 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:
p-benzoquinone 106-51-4	EC0	< 1 mg/l	30 min		not specified

# 12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
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)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Cumene hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	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)
Tributyl amine 102-82-9		aerobic	< 10 %	15 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Tributyl amine 102-82-9	inherently biodegradable	aerobic	94 %	15 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Tributyl amine 102-82-9	readily biodegradable	aerobic	80,3 %	29 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
p-benzoquinone 106-51-4		aerobic	23 - 61 %	19 d	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)

# 12.3. Bioaccumulative potential

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)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	2,3		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Cumene hydroperoxide 80-15-9	1,6	25 °C	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)
Tributyl amine 102-82-9	3,338	25 °C	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow- Stirring Method)
2-Hydroxyethyl methacrylate 868-77-9	0,42	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
p-benzoquinone 106-51-4	0,1 - 0,3	23 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

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

Hazardous substances	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.
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-15-9	Bioaccumulative (vPvB) criteria.
methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.
Tributyl amine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
102-82-9	Bioaccumulative (vPvB) criteria.
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
868-77-9	Bioaccumulative (vPvB) criteria.
p-benzoquinone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
106-51-4	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.

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

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

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

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

# 14.2. UN proper shipping name

Not dangerous goods
Not dangerous goods

### 14.3. Transport hazard class(es)

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

# 14.4. Packing group

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

### 14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

#### 14.6. Special precautions for user

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

# 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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Not applicable Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Not applicable Persistent organic pollutants (Regulation (EU) 2019/1021): Not applicable

# EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): Not applicable

VOC content 5 - 10 %

(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.

H310 Fatal in contact with skin.

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.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

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.

#### Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

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.