

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

Page 1 of 25

LOCTITE AA 358 LC known asLOCTITE 358 50ML GB,DE

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

1.1. Product identifier

LOCTITE AA 358 LC known asLOCTITE 358 50ML GB,DE

- **1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use: Ultraviolet adhesive
- **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): Serious eye damage Category 1 H318 Causes serious eye damage. Category 1 Skin sensitizer 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 Category 2 Chronic hazards to the aquatic environment H411 Toxic to aquatic life with long lasting effects. Skin irritation Category 2 H315 Causes skin irritation.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Contains	Hydroxypropyl methacrylate
	Acrylic acid
	2-Hydroxyethyl methacrylate
	2,2'-Ethylenedioxydiethyl dimethacrylate
<u>0' 1</u>	Derrore
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. H411 Toxic 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: Prevention	P261 Avoid breathing vapors.P273 Avoid release to the environment.P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. 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.

Care should be taken during the cure of these products by UV radiation to avoid exposure of the skin and especially of the eyes to direct or reflected UV radiation as long term effects could be harmful.

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:

UV curing acrylic adhesive

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	20- 40 %	Skin Sens. 1 H317
			Eye Irrit. 2 H319
Acrylic acid 79-10-7	201-177-9 01-2119452449-31	1-< 5%	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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	203-652-6 01-2119969287-21	1-< 5%	Skin Sens. 1B H317
Ethanone, 2,2-dimethoxy-1,2-diphenyl- 24650-42-8	246-386-6 01-2120000336-73	0,25-< 2,5 %	Aquatic Chronic 1 H410 Aquatic Acute 1 H400
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	219-784-2 01-2119513212-58	1-< 3 %	Eye Dam. 1 H318
Cumene hydroperoxide 80-15-9	201-254-7 01-2119475796-19	1-< 3 %	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
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	1-< 3%	Acute Tox. 4 H302 Acute Tox. 3 H311 Acute Tox. 4 H332 Skin Corr. 1A H314 Eye Dam. 1 H318 STOT SE 3 H335
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 H319
1,4-Naphthalenedione 130-15-4	204-977-6	0,01-< 0,1 %	Acute Tox. 3; Oral H301 Skin Irrit. 2; Dermal H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Acute Tox. 1; Inhalation

H330
STOT SE 3; Inhalation H335
Aquatic Acute 1 H400
Aquatic Chronic 1
H410 M factor (Acute Aquat Tox): 10 M factor (Chron 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:

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

Skin contact: Seek medical advice. Rinse with running water and soap.

Eye contact: Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion: Seek medical advice. Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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 case of fire, keep containers cool with water spray. Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Ensure adequate ventilation. Wear protective equipment.

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. Wash spillage site thoroughly with soap and water or detergent solution. 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)

Ultraviolet adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	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):		EH40 WEL
Acrylic acid 79-10-7 [ACRYLIC ACID]	10	29	Time Weighted Average (TWA):		EH40 WEL
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]	ррт	mg/m ³	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

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	Compartment	periou	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)		0,0003 mg/l 0,0013				
79-10-7	aqua (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	sediment (marine water)				0,00236 mg/kg		
Acrylic acid 79-10-7	Soil				1 mg/kg		
Acrylic acid 79-10-7	oral				0,03 g/kg		
Acrylic acid 79-10-7	Predator				0,03 g/kg		
Acrylic acid 79-10-7 2,2'-Ethylenedioxydiethyl dimethacrylate	Air		0,164 mg/l				
2,2 -Einylenedioxydiethyl dimethacrylate 109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (freshwater) aqua (marine		0,164 mg/1 0,0164				
109-16-0 2,2'-Ethylenedioxydiethyl dimethacrylate	water) sewage		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 2,2'-Ethylenedioxydiethyl dimethacrylate	Air						
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 2,2-Dimethoxy-1,2-diphenylethan-1-one	Predator aqua		0,229 mg/l				
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8 2,2-Dimethoxy-1,2-diphenylethan-1-one	(freshwater)		0,229 mg/1 0,184 mg/1				
24650-42-8	aqua (intermittent releases)		_				
2,2-Dimethoxy-1,2-diphenylethan-1-one	aqua (marine		0,0229				

24650-42-8	water)	mg/l	1 1	
2,2-Dimethoxy-1,2-diphenylethan-1-one	sewage	19,4 mg/l		
24650-42-8	treatment plant (STP)			
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	sediment (freshwater)		8,87 mg/kg	
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	sediment (marine water)		0,887 mg/kg	
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	Soil		1,64 mg/kg	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane	aqua (freshwater)	1 mg/l		
2530-83-8 [3-(2,3-	aqua (marine	0,1 mg/l		
Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	water)	0,1 llig/1		
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	aqua (intermittent releases)	1 mg/l		
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	Soil		0,13 mg/kg	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	sewage treatment plant (STP)	10 mg/l		
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	sediment (freshwater)		3,6 mg/kg	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	sediment (marine water)		0,36 mg/kg	
.alpha.,.alphaDimethylbenzyl	aqua	0,0031		
hydroperoxide 80-15-9	(freshwater)	mg/l		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)	0,00031 mg/l		
.alphaalphaDimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)	0,031 mg/l		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Sewage treatment plant	0,35 mg/l		
.alphaalphaDimethylbenzyl 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	
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/1		
Methacrylic acid 79-41-4	aqua (intermittent releases)	0,82 mg/l		
Methacrylic acid 79-41-4	Soil		1,2 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)	0,482 mg/l		
2-Hydroxyethyl methacrylate 868-77-9	aqua (marine water)	0,482 mg/l		
2-Hydroxyethyl methacrylate 868-77-9	sewage treatment plant (STP)	10 mg/1		
2-Hydroxyethyl methacrylate 868-77-9	aqua (intermittent releases)	1 mg/l		
2-Hydroxyethyl methacrylate 868-77-9	sediment (freshwater)		3,79 mg/kg	

2-Hydroxyethyl methacrylate 868-77-9	sediment (marine water)		3,79 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	Soil		0,476 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	Predator			

Derived No-Effect Level (DNEL):

Metharytic skil, munoster with propane 2781342.1 Workers dermal systemic effects Lag term systemic effects 4.2 mg/kg 2781342.1 General population Initializio Lag term systemic effects 14.7 mg/m2 2781342.1 General population General population dermal consorter 2.5 mg/kg 2781342.1 General population Initializio Lag term systemic effects 2.5 mg/kg 2781342.1 General population Initializio Lag term systemic effects 2.5 mg/kg 2781342.1 General population Initializio Lag term systemic effects 2.5 mg/kg 2781342.1 General population Img term systemic effects 2.5 mg/kg 2781342.1 General population Img term systemic effects 2.5 mg/kg 2781342.1 Workers inhalation Lag term systemic effects 2.5 mg/kg 2781342.1 Workers inhalation Activity term systemic effects 30 mg/m3 2781342.1 Workers inhalation Activity term systemic effects 30 mg/m3 2781342.1 Workers inhalation Activity term systemic effects 1 mg/cm2 2781342.1 General population inhalation Activity term 1 mg/cm2 2781542.1 General population	Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Metharytic acid, monoster with propen- 2781342-1 Workers Inhabition Long term systemic effects 14,7 mg/m3 2781342-1 Ceneral population dermal regionar 2,5 mg/kg 2781342-1 Ceneral population copourts 8,8 mg/m3 2781342-1 Ceneral population Inhabition Long term exposure 8,8 mg/m3 1.2-doil Ceneral population Inhabition Long term exposure 8,8 mg/m3 2781342-1 Ceneral population ong term exposure 30 mg/m3 2781342-1 Ceneral population ong term exposure 30 mg/m3 2781342-1 Workers inhabition Long term exposure 30 mg/m3 Acrylic acid Workers inhabition Long term exposure 30 mg/m3 Psi-07 Workers dermal Acuse/shor term exposure 1 mg/cm2 Psi-07 Ceneral population dermal Acuse/shor term exposure 1 mg/cm2 Psi-07 Ceneral population inhabition Long term exposure 1 mg/cm2 Psi-07 Ceneral population inh	1,2-diol	Workers	dermal	exposure -		4,2 mg/kg	
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2781-30-1 ome sylemic effects		Workers	Inhalation			14,7 mg/m3	
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2530-83-8	Ĩ		systemic effects	l l	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	General population	oral	Long term exposure - systemic effects	12,5 mg/kg	
.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	
2-Hydroxyethyl methacrylate 868-77-9	Workers	dermal	Long term exposure - systemic effects	1,3 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	Workers	Inhalation	Long term exposure - systemic effects	4,9 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	General population	dermal	Long term exposure - systemic effects	0,83 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	General population	Inhalation	Long term exposure - systemic effects	2,9 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	General population	oral	Long term exposure - systemic effects	0,83 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

UV lamp should be designed, installed and operated in such a way as to eliminate exposure of the skin and eyes to stray radiation

Respiratory protection: Ensure adequate ventilation. 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: Tightly fitting safety goggles Avoid eye contact. 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

Odor Odour threshold

Appearance

pН

Melting point Solidification temperature Initial boiling point Flash point Evaporation rate Flammability Explosive limits Vapour pressure Relative vapour density: Density 0 Bulk density Solubility Solubility (qualitative) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity (Brookfield; Instrument: RVT; speed of rotation: 20 min-1; Spindle No: 3) Viscosity (kinematic) Explosive properties Oxidising properties

liquid Clear characteristic No data available / Not applicable

Not applicable No data available / Not applicable No data available / Not applicable No data available / Not applicable > 100 °C (> 212 °F) No data available / Not applicable 1,05 g/cm3

No data available / Not applicable 2.000 - 3.000 mPa.s

No data available / Not applicable 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 oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions See section reactivity

10.4. Conditions to avoid Protect from direct sunlight.

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:

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
Ethanone, 2,2-dimethoxy- 1,2-diphenyl- 24650-42-8	LD50	> 5.000 mg/kg	rat	not specified
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LD50	8.025 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	rat	not specified
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rat	not specified
1,4-Naphthalenedione 130-15-4	LD50	190 mg/kg	rat	not specified

Acute dermal toxicity:

Hazardous substances CAS-No.	Value type	Value	Species	Method
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)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	> 2.000 mg/kg	mouse	not specified
Ethanone, 2,2-dimethoxy- 1,2-diphenyl- 24650-42-8	LD50	> 5.000 mg/kg	rat	not specified
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LD50	4.250 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Cumene hydroperoxide 80-15-9	LD50	1.200 - 1.520 mg/kg		not specified
Methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rabbit	not specified

Acute inhalative 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	Test atmosphere	Exposure time	Species	Method
Acrylic acid 79-10-7	LC50	> 5,1 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Acrylic acid 79-10-7	Acute toxicity estimate (ATE)	11 mg/l	vapour			Expert judgement
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LC50	> 5,3 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Methacrylic acid 79-41-4	LC50	> 3,6 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute 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
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	not irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
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:

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)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	highly irritating	20 s	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

Respiratory or skin sensitization:

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

Hazardous substances CAS-No.	Result	Test type	Species	Method
Acrylic acid 79-10-7	not sensitising	Skin painting test	guinea pig	not specified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

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)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	A mutagenic potential can not be excluded.	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation 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		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 water		Generation Reproduction Toxicity Study)
2,2'-Ethylenedioxydiethyl dimethacrylate	NOAEL P 1.000 mg/kg		oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose
109-16-0	NOAEL F1 1.000 mg/kg				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)
Methacrylic acid 79-41-4	NOAEL P 50 mg/kg	Two generation	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction
	NOAEL F1 400 mg/kg	study			Toxicity Study)
	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 \geq 1.000 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)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	NOAEL 500 mg/kg	oral: unspecified	28 d	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	NOAEL 0,225 mg/kg	inhalation	14 d	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
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 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)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LC50	16,4 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	LC50	7,2 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	LC50	55 mg/l	96 h	Cyprinus carpio	EU Method C.1 (Acute Toxicity for Fish)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	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)
2-Hydroxyethyl methacrylate 868-77-9	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (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 CAS-No.	Value type	Value	Exposure time	Species	Method
Hydroxypropyl methacrylate 27813-02-1	EC50	> 143 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Acrylic acid 79-10-7	EC50	95 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	EC50	26 mg/l	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC50	324 mg/l	48 h	Simocephalus vetulus	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methacrylic acid 79-41-4	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
2-Hydroxyethyl methacrylate 868-77-9	EC50	380 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Hydroxypropyl methacrylate 27813-02-1	NOEC	45,2 mg/l	21 d		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)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	NOEC	100 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
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)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	EC50	0,17 mg/l	72 h	Scenedesmus sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC50	119 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga, Growth Inhibition Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC10	40 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 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)
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)
1,4-Naphthalenedione 130-15-4	EC50	0,011 mg/l	72 h	Dunaliella bioculata	OECD Guideline 201 (Alga, Growth Inhibition Test)

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

Toxicity to microorganisms

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
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)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	EC 50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	NOEC	> 100 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
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
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
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)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	not readily biodegradable.	aerobic	37 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Cumene hydroperoxide 80-15-9		no data	0 %	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)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
1,4-Naphthalenedione 130-15-4	not readily biodegradable.	no data	0 - 60 %		OECD 301 A - F

12.3. Bioaccumulative potential

No data available.

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 CAS-No.	LogPow	Temperature	Method
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)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	3,42		not specified
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	0,5	20 °C	QSAR (Quantitative Structure Activity Relationship)
Cumene hydroperoxide 80-15-9	2,16		not specified
Methacrylic acid 79-41-4	0,93	22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
2-Hydroxyethyl methacrylate 868-77-9	0,42	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
1,4-Naphthalenedione 130-15-4	1,71		not specified

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.
Ethanone, 2,2-dimethoxy-1,2-diphenyl-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
24650-42-8	Bioaccumulative (vPvB) criteria.
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2530-83-8	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.
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
868-77-9	Bioaccumulative (vPvB) criteria.
1,4-Naphthalenedione	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
130-15-4	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			
	ADR	3082		
	RID	3082		
	ADN	3082		
	IMDG	3082		
	IATA	3082		
14.2.				
14.2.	UN proper shipping name			
	ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one,Acrylic acid)		
	RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one,Acrylic acid)		
	ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one,Acrylic acid)		
	IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one,Acrylic acid)		
	IATA	Environmentally hazardous substance, liquid, n.o.s. (2,2-Dimethoxy-1,2-		
		diphenylethan-1-one,Acrylic acid)		
14.3.	Transport h	azard class(es)		
	ADR	9		
	RID	9		
	ADN	9		
	IMDG	9		
	IATA	9		
14.4.	Packing group			
	ADR	III		
	RID	III		
	ADN	III		
	IMDG			
	ΙΑΤΑ	III		
14.5.	Environmen	tal hazards		
	ADR	not applicable		
	RID	not applicable		
	ADN	not applicable		
	IMDG	Marine pollutant		
	IATA	not applicable		
14.6.	Special prec	autions for user		
	ADR	not applicable Tunnelcode:		
	RID	not applicable		
	ADN	not applicable		
	IMDG	not applicable		
	IATA	not applicable		
	containers wi kg for solid s	t classifications in this section apply generally to packed and bulk goods alike. For ith a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 ubstances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), may be applied, which can result in a deviation from the transport classification for packed		
14.7.	Transport in	n 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 %

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.

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.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Further information:

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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.