

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

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SDS No.: 168434

V008.1

Revision: 04.10.2022 printing date: 13.07.2023

Replaces version from: 18.03.2022

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

1.1. Product identifier

LOCTITE AA 326 known as Loctite 326

LOCTITE AA 326 known as Loctite 326

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

Intended use:

Acrylic 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

SDSinfo.Adhesive@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkeladhesives.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.

Category 2 Serious eye irritation

H319 Causes serious eye irritation.

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 2-Hydroxyethyl methacrylate

Hydroxypropyl methacrylate

Acrylic acid

Acetic acid, 2-phenylhydrazide

2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester

Signal word: Warning

Hazard statement: H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. 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:

Prevention

P280 Wear protective gloves. P261 Avoid breathing vapors.

P273 Avoid release to the environment.

Precautionary statement:

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

Response

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

None if used properly.

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

Following substances are present in a concentration >= 0.1% and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration ≥ the concentration limit that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
2-Hydroxyethyl methacrylate 868-77-9 212-782-2 01-2119490169-29	20- 40 %	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319		
Isobornyl methacrylate 7534-94-3 231-403-1 01-2119886505-27	10- 20 %	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412	STOT SE 3; H335; C >= 10 %	
Hydroxypropyl methacrylate 27813-02-1 248-666-3 01-2119490226-37	1-< 5 %	Skin Sens. 1, H317 Eye Irrit. 2, H319		
Acrylic acid 79-10-7 201-177-9 01-2119452449-31	0,25-< 2,5 %	Acute Tox. 4, Dermal, 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	STOT SE 3; H335; C >= 1 % ===== M acute = 1 ===== dermal:ATE = 1.100 mg/kg inhalation:ATE = 11 mg/l;vapour	EU OEL
Cumene hydroperoxide 80-15-9 201-254-7 01-2119475796-19	0,1-< 1 %	STOT RE 2, H373 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 STOT SE 3, H335	Eye Irrit. 2; H319; C 1 - < 3 % Skin Irrit. 2; H315; C 3 - < 10 % Eye Dam. 1; H318; C 3 - < 10 % STOT SE 3; H335; C >= 1 % Skin Corr. 1B; H314; C >= 10 % ===== dermal:ATE = 1.100 mg/kg	
methacrylic acid 79-41-4 201-204-4 01-2119463884-26	0,1-< 1 %	Acute Tox. 4, Oral, H302 Acute Tox. 3, Dermal, H311 Acute Tox. 4, Inhalation, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	STOT SE 3; H335; C >= 1 % ====== dermal:ATE = 500 mg/kg inhalation:ATE = 3,61 mg/l;dust/mist	
Acetic acid, 2-phenylhydrazide 114-83-0 204-055-3	0,1-< 1 %	Acute Tox. 3, Oral, H301 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, Inhalation, H335 Carc. 2, H351		
2-Propenoic acid, 2-methyl-, 2- (2-hydroxyethoxy)ethyl ester 2351-43-1	0,1-< 1 %	Eye Irrit. 2, H319 Skin Sens. 1, H317		

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.

Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

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

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

water, carbon dioxide, foam, powder

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

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Keep away from sources of ignition.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid skin and eye contact. See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Refer to Technical Data Sheet

7.3. Specific end use(s)

Acrylic 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]	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 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):

All-ylovoyednyl methacrylate agua 0.482 mgl 0.	Name on list	Environmental Compartment	Value				Remarks	
10 mg 1 mg			period	mg/l	ppm	mg/kg	others	
24-Hydroxychyl methacrylate sex-sege moranner plant Sirp	2-Hydroxyethyl methacrylate	aqua				3 3		
10 mg 1								
2-Hydroxyethyl methacrylate sewage				0,482 mg/l				
Seas-77-9		/		10 7				
Additional Content				10 mg/l				
2-Hydroxyshyl methacrylate (micromitent releases)	868-77-9							
Se8-77-9 Cintermittent Circlescos Cintermittent Cint	2-Hydrovyethyl methacrylate			1 mg/l				
Celeses Cele				1 mg/1				
1868-77-9								
1868-77-9	2-Hydroxyethyl methacrylate	sediment				3,79 mg/kg		
(marine water)		(freshwater)						
2-Hydroxyethyl methacylate 888-87-9 2-Hydroxyethyl methacylate 888-87-9 2-Hydroxyethyl methacylate 888-87-9 2-Hydroxyethyl methacylate 888-87-9 1-A-intrinethylbicyclo[2.2.1]bept-2-yl methacylate 17534-94-3 1-Exo-1,77-riniethylbicyclo[2.2.1]bept-2-yl methacylate 17534-94-3 1-Exo-1,7-riniethylbicyclo[2.2.1]bept-2-yl methacylate 17534-94-3 1-Exo-1,7-riniethylbicyclo[2.2.1	2-Hydroxyethyl methacrylate					3,79 mg/kg		
SoS-77-9 mgkg no potential for hisascumulation SoS-77-9 mgkg no potential for hisascumulation SoS-77-9 methacrylate SoS-77-9 methacrylate SoS-77-9 methacrylate SoS-77-9 methacrylate SoS-17-7 mirethylbicyclo[2.2.1]hept-2-yl m								
2-Hydroxyethyl methacrylate 88-87-79 2-Hydroxyethyl methacrylate 88-87-79 2-Hydroxyethyl methacrylate 88-87-79 1 memory methacrylate 1 mg/l 1		Soil						
Sos-77-9						mg/kg		
Agricology Marine water		Predator						
Se8-37.9		Manina		1 /1				bioaccumulation
Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate Soil				1 mg/1				
				4.66 µg/l				
1534-94-3 Soil Soil Market Ma				4,00 μg/1				
Exo-1,77-trimethylbicyclo[2.2.1]hept-2-yl methacrylate (STP) Secondary treatment plant (STP) Secondary		(iresir water)						
TS34-94-3 Exo-1,77-trimethylbicyclo[2,2.1]hept-2-yl methacrylate TS34-94-3 TS44-94-3	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl	Soil				0,118		
Exo-1,77-trimethylbicyclo[2.2.1]hept-2-yl methacrylate (STP) Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sa4-94-3 Sediment (freshwater) Sa4-94-3 Sex-1,77-trimethylbicyclo[2.2.1]hept-2-yl aqua (marine water) Sa4-94-3 Sex-1,77-trimethylbicyclo[2.2.1]hept-2-yl aqua (marine water) Sa4-94-3 Sex-1,77-trimethylbicyclo[2.2.1]hept-2-yl sediment (marine water) Sa4-94-3 Sex-1,77-trimethylbicyclo[2.2.1]hept-2-yl aqua (marine water) Sa4-94-3 Sex-1,77-trimethylbicyclo[2.2.1]hept-2-yl sediment (marine water) Sa4-94-3 Sa4-94	methacrylate					mg/kg		
methacrylate 7534-94-3 CSTP								
7534-94-3 CSTP CS				2,45 mg/l				
Exo-1,77-timethylbicyclo[2.2.1]hept-2-yl methacrylate T534-94-3 Exo-1,77-timethylbicyclo[2.2.1]hept-2-yl mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/								
methacrylate freshwater) mg/kg m						0.704		
7534-94-3 Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-y1 methacrylate acid, monoester with propane-1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-1,2-diol 27813-02-1 Metha								
Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate 7534-94-3		(freshwater)				mg/kg		
methacrylate 7:534-94-3 Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl aqua (marine water) Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate 7:534-94-3 Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate 7:534-94-3 Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate 7:534-94-3 Methacrylic acid, monoester with propane-1,2-diol 27813-02-1 Methacrylic acid,		20112		0.0179				
Tesaes								
methacrylate 7534-94-3 Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate 7534-94-3 Methacrylic acid, monoester with propane-1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-1,2-diol 2,0-diol 2,		`		ing i				
methacrylate 7534-94-3 Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate 7534-94-3 Methacrylic acid, monoester with propane-1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-1,2-diol 2,0-diol 2,	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl	aqua (marine		0,000466				
Exo-1,7,7-trimethylbicyclo[2,2,1]hept-2-yl methacrylate (marine water) Sediment (marine wate	methacrylate	water)		mg/l				
methacrylate 7534-94-3 Methacrylic acid, monoester with propane- 1.2-diol 27813-02-1 Methac								
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl					0,06 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester wi		(marine water)						
1.2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-		1		0.004/1				
27813-02-1 aqua (marine water) aqua (marine water)				0,904 mg/1				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1		(Heshwater)						
1,2-diol water) Methacrylic acid, monoester with propane- 1,2-diol (STP) Methacrylic acid, monoester with propane- 1,2-diol (intermittent releases) Methacrylic acid, monoester with propane- 1,2-diol (intermittent releases) Methacrylic acid, monoester with propane- 1,2-diol (freshwater) Methacrylic acid, monoester with propane- 1,2-diol (marine water) Methacrylic acid, monoester with propane- 1,2-diol (marine water) Soil (Marine water) Methacrylic acid, monoester with propane- 1,2-diol (monoester with propa	2,018 02 1	aqua (marine		0.904 mg/l				
27813-02-1 Sewage treatment plant (STP)				0,50.11191				
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-	27813-02-1							
27813-02-1 (STP) (aqua (intermittent releases) (intermittent releases) (freshwater)	Methacrylic acid, monoester with propane-			10 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester wi								
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane-								
27813-02-1 releases				0,972 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester wi								
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacryl						6.29 mg/kg		+
27813-02-1 Sediment (marine water) 6,28 mg/kg						0,26 Hig/Kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1		(ITCSITWATCI)						
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator Predator		sediment				6.28 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- intermittent Marine water - intermittent 0,972 mg/l 0,972 mg/l intermittent no hazard identified no hazard identified Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator No potential for		(marine water)						
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- intermittent Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator Methacrylic acid, monoester with propane- Predator mg/kg 0,972 mg/l no hazard identified							<u> </u>	
27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator Methacrylic acid, monoester with propane- New York acid, monoester with propa		Soil						
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator Marine water - intermittent 0,972 mg/1 no hazard identified no potential for						mg/kg		
1,2-diol intermittent intermitt				0.072	_			
27813-02-1 Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator Predator In potential for				0,972 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator no hazard identified no hazard identified no potential for		intermittent						
1,2-diol 27813-02-1 Methacrylic acid, monoester with propane- Predator no potential for		Air					-	no hazard identified
27813-02-1 Predator no potential for		Air						по пахага іденціїед
Methacrylic acid, monoester with propane- Predator no potential for								
		Predator						no potential for
1,2-diol bioaccumulation		- 1200101						

27912 02 1	i i	i i	1 1	ĺ
27813-02-1		0.002 //		
Acrylic acid 79-10-7	aqua (freshwater)	0,003 mg/l		
Acrylic acid	aqua (marine	0.0003		
		- ,		
79-10-7	water)	mg/l		
Acrylic acid	sewage	0,9 mg/l		
79-10-7	treatment plant			
	(STP)			
Acrylic acid	sediment		0,0236	
79-10-7	(freshwater)		mg/kg	
Acrylic acid	sediment		0,00236	
79-10-7	(marine water)		mg/kg	
Acrylic acid	Soil		1 mg/kg	
79-10-7				
Acrylic acid	oral		0,03 g/kg	
79-10-7				
Acrylic acid	Air			no hazard identified
79-10-7				
.alpha.,.alphaDimethylbenzyl	aqua	0,0031		
hydroperoxide	(freshwater)	mg/l		
80-15-9				
.alpha.,.alphaDimethylbenzyl	aqua	0,031 mg/l		
hydroperoxide	(intermittent			
80-15-9	releases)			
.alpha.,.alphaDimethylbenzyl	aqua (marine	0,00031		
hydroperoxide	water)	mg/l		
80-15-9		ling i		
.alpha.,.alphaDimethylbenzyl	sewage	0,35 mg/l		
hydroperoxide	treatment plant	0,55 mg/1		
80-15-9	(STP)			
.alpha.,.alphaDimethylbenzyl	sediment		0.023	
hydroperoxide	(freshwater)		mg/kg	
80-15-9	(Iresiiwater)		mg/kg	
.alpha.,.alphaDimethylbenzyl	sediment		0.0023	
hydroperoxide	(marine water)		mg/kg	
80-15-9	(marme water)		mg/kg	
.alpha.,.alphaDimethylbenzyl	Soil		0,0029	
hydroperoxide	3011		mg/kg	
80-15-9			mg/kg	
methacrylic acid		0.92/1		
79-41-4	aqua (freshwater)	0,82 mg/l		
		0.02		
methacrylic acid	aqua (marine	0,82 mg/l		
79-41-4	water)	10 7		
methacrylic acid	sewage	10 mg/l		
79-41-4	treatment plant			
	(STP)			
methacrylic acid	aqua	0,82 mg/l		
79-41-4	(intermittent			
	releases)			
methacrylic acid	Soil		1,2 mg/kg	
79-41-4				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-Hydroxyethyl methacrylate 868-77-9	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
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate 7534-94-3	Workers	dermal	Long term exposure - systemic effects		1,04 mg/kg	
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate 7534-94-3	General population	dermal	Long term exposure - systemic effects		0,625 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	Inhalation	Long term exposure - systemic effects		14,7 mg/m3	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	no hazard identified
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
.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 -		6,3 mg/m3	

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

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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:

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

Physical state liquid
Delivery form liquid
Colour amber
Odor acrylic

Melting point Not applicable, Product is a liquid

Solidification temperature < 0 °C (< 32 °F) Initial boiling point > 149 °C (> 300.2 °F) Flammability The product is not flammable.

Explosive limits

lower 2%(V); upper 8%(V);

Upper/lower explosion limit (Acrylic Acid)

Flash point > 93,3 °C (> 199.94 °F); Tagliabue closed cup Auto-ignition temperature Not applicable, The product is not flammable.

Decomposition temperature Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen

conditions of use

pH Not applicable, Product is non-soluble (in water).

Viscosity (kinematic) 15.000 - 17.000 mm2/s

(40 °C (104 °F);)
Solubility (qualitative) practically insoluble

(20 °C (68 °F); Solvent: Water)
Partition coefficient: n-octanol/water

Not applicable

Vapour pressure < 13 mbar $(26,6 \,^{\circ}\text{C} \, (79.9 \,^{\circ}\text{F}))$

Vapour pressure <1,3 kPa (20 °C (68 °F))

Density 1,0 g/cm3 None (20 °C (68 °F))

Relative vapour density:

Not applicable, Heavier than air
Particle characteristics

Not applicable

icle characteristics

Not applicable

Product is a liquid

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.

Acids.

Reducing agents. 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 under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

SECTION 11: Toxicological information

1.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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
2-Hydroxyethyl methacrylate 868-77-9	LD50	5.564 mg/kg	rat	FDA Guideline
Isobornyl methacrylate 7534-94-3	LD50	3.160 mg/kg	rat	not specified
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Acrylic acid 79-10-7	LD50	1.500 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
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)
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	270 mg/kg	rat	not specified
2-Propenoic acid, 2- methyl-, 2-(2- hydroxyethoxy)ethyl ester 2351-43-1	LD50	5.564 mg/kg	rat	FDA Guideline

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		_	
2-Hydroxyethyl	LD50	> 5.000 mg/kg	rabbit	not specified
methacrylate				
868-77-9				
Isobornyl methacrylate	LD50	> 3.000 mg/kg	rabbit	not specified
7534-94-3				
Hydroxypropyl	LD50	> 5.000 mg/kg	rabbit	not specified
methacrylate				
27813-02-1				
Acrylic acid	Acute	1.100 mg/kg		Expert judgement
79-10-7	toxicity			
	estimate			
	(ATE)			
Acrylic acid	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
79-10-7				
Cumene hydroperoxide	Acute	1.100 mg/kg		Expert judgement
80-15-9	toxicity			
	estimate			
.1 1: 1:	(ATE)	500 1 000	111	D 17 11 0
methacrylic acid	LD50	500 - 1.000	rabbit	Dermal Toxicity Screening
79-41-4	. .	mg/kg		E (1)
methacrylic acid 79-41-4	Acute	500 mg/kg		Expert judgement
/9-41-4	toxicity estimate			
2 Duamanaia asid 2	(ATE) LD50	> 5 000 m a/l	rabbit	not anadicad
2-Propenoic acid, 2- methyl-, 2-(2-	LD50	> 5.000 mg/kg	rabbit	not specified
hydroxyethoxy)ethyl ester				
2351-43-1				

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		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		-			1 0
	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	dust/mist			Expert judgement
79-41-4	toxicity					
	estimate					
	(ATE)					

Skin corrosion/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
2-Hydroxyethyl methacrylate 868-77-9	slightly irritating	24 h	rabbit	Draize Test
Isobornyl methacrylate 7534-94-3	mildly irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Hydroxypropyl methacrylate 27813-02-1	not irritating	24 h	rabbit	Draize Test
Acrylic acid 79-10-7	Category 1 (corrosive)	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
2-Propenoic acid, 2- methyl-, 2-(2- hydroxyethoxy)ethyl ester 2351-43-1	not irritating	24 h	rabbit	Draize Test

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
2-Hydroxyethyl methacrylate 868-77-9	Category 2B (mildly irritating to eyes)		rabbit	Draize Test
Hydroxypropyl methacrylate 27813-02-1	Category 2B (mildly irritating to eyes)		rabbit	Draize Test
Acrylic acid 79-10-7	Category 1 (irreversible effects on the eye)		rabbit	BASF Test
methacrylic acid 79-41-4	corrosive		rabbit	Draize Test
2-Propenoic acid, 2- methyl-, 2-(2- hydroxyethoxy)ethyl ester 2351-43-1	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 CAS-No.	Result	Test type	Species	Method
2-Hydroxyethyl methacrylate 868-77-9	not sensitising	Buehler test	guinea pig	Buehler test
2-Hydroxyethyl methacrylate 868-77-9	sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method
Isobornyl methacrylate 7534-94-3	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Hydroxypropyl methacrylate 27813-02-1	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Hydroxypropyl methacrylate 27813-02-1	sensitising	Guinea pig maximisation test	guinea pig	not specified
Acrylic acid 79-10-7	not sensitising	Freund's complete adjuvant test	guinea pig	Klecak Method
Acrylic acid 79-10-7	not sensitising	Split adjuvant test	guinea pig	Maguire Method
methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	equivalent or similar to 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
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)
Isobornyl methacrylate 7534-94-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Isobornyl methacrylate 7534-94-3	negative		with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Isobornyl methacrylate 7534-94-3	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
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	positive	in vitro mammalian chromosome aberration test	with and without		Chromosome Aberration Test
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	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Acrylic acid 79-10-7	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to 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		equivalent or similar to OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells
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)

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
2-Hydroxyethyl methacrylate 868-77-9	not carcinogenic	inhalation	2 y 6 h/d, 5 d/w	rat	female	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
2-Hydroxyethyl methacrylate 868-77-9	not carcinogenic	inhalation	2 y 6 h/d, 5 d/w	rat	male	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
Hydroxypropyl methacrylate 27813-02-1	not carcinogenic	inhalation	2 y 6 h/d, 5 d/w	rat	male	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
Acrylic acid 79-10-7	not carcinogenic	oral: drinking water	26 - 28 m continuously	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
Acrylic acid 79-10-7	not carcinogenic	dermal	21 m 3 times/w	mouse	male/female	not specified
methacrylic acid 79-41-4	not carcinogenic	inhalation	2 y	mouse	male/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 CAS-No.	Result / Value	Test type	Route of application	Species	Method
2-Hydroxyethyl methacrylate 868-77-9	NOAEL P >= 1.000 mg/kg NOAEL F1 >= 1.000 mg/kg	screening	oral: gavage	rat	equivalent or similar to OECD Guideline 422 (Combined Repeated Dose Toxicity Study)
Isobornyl methacrylate 7534-94-3	NOAEL P 25 mg/kg NOAEL F1 500 mg/kg		oral: gavage	rat	OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL P 300 mg/kg NOAEL F1 1.000 mg/kg	screening	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL P 400 mg/kg NOAEL F1 400 mg/kg	two- generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
Acrylic acid 79-10-7	NOAEL P 83 mg/kg NOAEL F1 250 mg/kg	one- generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
Acrylic acid 79-10-7	NOAEL P 240 mg/kg NOAEL F1 53 mg/kg NOAEL F2 53 mg/kg	two- generation study	oral: drinking water	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
methacrylic acid 79-41-4	NOAEL P 50 mg/kg NOAEL F1 400 mg/kg NOAEL F2 400 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

STOT-repeated exposure::

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

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
2-Hydroxyethyl methacrylate 868-77-9	NOAEL 100 mg/kg	oral: gavage	49 d daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL 0,352 mg/l	inhalation	90 d 6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Hydroxypropyl methacrylate 27813-02-1	NOAEL 300 mg/kg	oral: gavage	49 d daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL 0,352 mg/l	inhalation	90 d 6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Acrylic acid 79-10-7	NOAEL 40 mg/kg	oral: drinking water	12 m daily	rat	equivalent or similar to OECD Guideline 452 (Chronic Toxicity Studies)
Acrylic acid 79-10-7	NOAEL 0,015 mg/l	inhalation: vapour	90 d 6 h/d, 5 d/w	mouse	equivalent or similar to OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
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)

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

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				
2-Hydroxyethyl methacrylate	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish,
868-77-9					Acute Toxicity Test)
Isobornyl methacrylate	LC50	1,79 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
7534-94-3					Acute Toxicity Test)
Hydroxypropyl methacrylate	LC50	493 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
27813-02-1					
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)
Acrylic acid	NOEC	>= 10,1 mg/l	45 d	Oryzias latipes	OECD Guideline 210 (fish
79-10-7					early lite stage toxicity test)
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)

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				
2-Hydroxyethyl methacrylate	EC50	380 mg/l	48 h	Daphnia magna	OECD Guideline 202
868-77-9					(Daphnia sp. Acute
					Immobilisation Test)
Isobornyl methacrylate	EC50	> 2,57 mg/l	48 h	Daphnia magna	OECD Guideline 202
7534-94-3					(Daphnia sp. Acute
					Immobilisation Test)
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)

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				
2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Isobornyl methacrylate 7534-94-3	NOEC	0,233 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	45,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Acrylic acid 79-10-7	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)

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
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)	,
Isobornyl methacrylate 7534-94-3	EC50	2,66 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Isobornyl methacrylate 7534-94-3	NOEC	0,254 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	EC50	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Acrylic acid 79-10-7	EC50	0,13 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Cumene hydroperoxide 80-15-9	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)	,
methacrylic acid 79-41-4	EC50	45 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:
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	not specified
methacrylic acid 79-41-4	EC10	100 mg/l	17 h		not specified

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Isobornyl methacrylate 7534-94-3	readily biodegradable	aerobic	70 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	28 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Acrylic acid 79-10-7	inherently biodegradable	aerobic	100 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Cumene hydroperoxide 80-15-9	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)
2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester 2351-43-1	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Isobornyl methacrylate 7534-94-3	37	56 day	24 °C	Danio rerio	OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)
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

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
2-Hydroxyethyl methacrylate 868-77-9	0,42	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Isobornyl methacrylate 7534-94-3	5,09		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC 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)
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)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74		not specified

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
868-77-9	Bioaccumulative (vPvB) criteria.
Isobornyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
7534-94-3	Bioaccumulative (vPvB) criteria.
Hydroxypropyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
27813-02-1	Bioaccumulative (vPvB) criteria.
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-15-9	Bioaccumulative (vPvB) criteria.
methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

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

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

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 or ID 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
ADK	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. Maritime transport in bulk according to IMO instruments

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): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Not applicable

VOC content (2010/75/EC)

< 3,00 %

15.2. Chemical safety assessment

A chemical safety assessment has 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 vapour.

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.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL: Substance with a Union workplace exposure limit
EU EXPLD 1: Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2 Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC: Substance of very high concern (REACH Candidate List)
PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria

PBT/vPvB: Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

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 (SDSinfo.Adhesive@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.

Annex - Exposure Scenarios:

 $Exposure\ Scenarios\ for\ 2-Hydroxyethyl\ methacrylate\ can\ be\ downloaded\ under\ the\ following\ link:\ https://mysds.henkel.com/index.html#/appSelection$