

LOCTITE 5208

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

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SDS No.: 173021

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Replaces version from: 21.03.2022

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

#### 1.1. Product identifier

LOCTITE 5208

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

Intended use:

Adhesive

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

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

SDSinfo.Adhesive@henkel.com

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

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification (CLP):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

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

#### 2.2. Label elements

# Label elements (CLP):

Hazard pictogram:



Contains

Hexanedioic acid, polymer with 2,4-diisocyanato-1-methylbenzene and 2,2'-oxybis[ethanol], 2-hydroxyethyl methacrylate-blocked

Polyethylene glycol monomethyl ether methacrylate

2,2'-Ethylenedioxydiethyl dimethacrylate

Hydroxypropyl methacrylate Cumene hydroperoxide Acetic acid, 2-phenylhydrazide maleic acid

2-Hydroxyethyl methacrylate

methyl methacrylate

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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.
	<u> </u>
Precautionary statement:	"***" ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of contents/container in accordance with national regulation.***
Precautionary statement:	P261 Avoid breathing vapors.
Prevention	P280 Wear protective gloves.
-	
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.

Following substances are present in a concentration  $\geq$  the concentration limit for depiction in Section 3 and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in a concentration  $\geq$  the concentration limit for depiction in Section 3 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
Polyethylene glycol monomethyl ether methacrylate 26915-72-0	5-< 10 %	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	dermal:ATE = > 5.000 mg/kg oral:ATE = > 5.000 mg/kg inhalation:ATE = > 5 mg/l;dust/mist	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 203-652-6 01-2119969287-21	5- < 10 %	Skin Sens. 1B, H317	dermal:ATE = > 5.000 mg/kg inhalation:ATE = 28,17 mg/l;dust/mist	
Hydroxypropyl methacrylate 27813-02-1 248-666-3 01-2119490226-37	1-< 5 %	Skin Sens. 1, H317 Eye Irrit. 2, H319		
Cumene hydroperoxide 80-15-9 201-254-7 01-2119475796-19	1-< 3 %	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	
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		
maleic acid 110-16-7 203-742-5 01-2119488705-25	0,1-< 1 %	Acute Tox. 4, Oral, H302 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4, Dermal, H312	Skin Sens. 1; H317; C >= 0,1 %	
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		
methyl methacrylate 80-62-6 201-297-1 01-2119452498-28	0,1-< 1 %	Flam. Liq. 2, H225 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317		EU OEL
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	

If no ATE values are displayed, please refer to LD/LC50 values in Section 11. For full text of the H - statements and other abbreviations see section 16 "Other information".

# **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.

Eve 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: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

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

SKIN: Redness, inflammation.

#### 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:

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

# 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Refer to Technical Data Sheet

# 7.3. Specific end use(s)

Adhesive

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

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50	208	Time Weighted Average (TWA):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100	416	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative	ECTLV
Methyl methacrylate	100		Short Term Exposure	15 minutes	IR_OEL

80-62-6 [METHYL METHACRYLATE]			Limit (STEL):	Indicative OELV	
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
			mg/l	ppm	mg/kg	others	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	aqua (freshwater)		0,164 mg/l				
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (marine		0,0164				
109-16-0	water)		mg/l				
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sewage treatment plant (STP)		10 mg/l				
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua		0,164 mg/l				
109-16-0	(intermittent releases)						
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	Soil				0,274		
109-16-0					mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Air						no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Predator						no potential for bioaccumulation
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	aqua (intermittent		0,972 mg/l				
27813-02-1	releases)						
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	Soil				0,727 mg/kg		
27813-02-1 Methacrylic acid, monoester with propane-	Marine water -		0,972 mg/l				
1,2-diol 27813-02-1	intermittent		0,572 mg/1				
Methacrylic acid, monoester with propane- 1,2-diol	Air						no hazard identified
27813-02-1	D 1.						1.6
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Predator						no potential for bioaccumulation
.alpha.,.alphaDimethylbenzyl hydroperoxide	aqua (freshwater)		0,0031 mg/l				
80-15-9 .alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l				
alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				
alpha.,alphaDimethylbenzyl hydroperoxide 80-15-9	sewage treatment plant (STP)		0,35 mg/l				
alpha.,alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
alpha.,.alphaDimethylbenzyl hydroperoxide	Soil				0,0029 mg/kg		

80-15-9	1 1	1 1	1 1	I
Maleic acid	aqua	0,1 mg/l		
110-16-7	(freshwater)	0,1 mg/1		
Maleic acid	aqua	0,4281		
110-16-7	(intermittent	mg/l		
	releases)	1118/1		
Maleic acid	sediment		0.334	
110-16-7	(freshwater)		mg/kg	
Maleic acid	sewage	44,6 mg/l	8 8	
110-16-7	treatment plant	1 1,4 11-8		
	(STP)			
Maleic acid	aqua (marine	0,01 mg/l		
110-16-7	water)			
Maleic acid	sediment		0,0334	
110-16-7	(marine water)		mg/kg	
Maleic acid	Soil		0,0415	
110-16-7			mg/kg	
2-Hydroxyethyl methacrylate	aqua	0,482 mg/l		
868-77-9	(freshwater)			
2-Hydroxyethyl methacrylate	aqua (marine	0,482 mg/l		
868-77-9	water)			
2-Hydroxyethyl methacrylate	sewage	10 mg/l		
868-77-9	treatment plant			
	(STP)			
2-Hydroxyethyl methacrylate	aqua	1 mg/l		
868-77-9	(intermittent			
	releases)			
2-Hydroxyethyl methacrylate	sediment		3,79 mg/kg	
868-77-9	(freshwater)			
2-Hydroxyethyl methacrylate	sediment		3,79 mg/kg	
868-77-9	(marine water)			
2-Hydroxyethyl methacrylate	Soil		0,476	
868-77-9			mg/kg	
2-Hydroxyethyl methacrylate	Predator			no potential for
868-77-9				bioaccumulation
2-Hydroxyethyl methacrylate	Marine water -	1 mg/l		
868-77-9	intermittent			
methyl methacrylate	aqua	0,94 mg/l		
80-62-6	(freshwater)			
methyl methacrylate	aqua (marine	0,94 mg/l		
80-62-6	water)			
methyl methacrylate	aqua	0,94 mg/l		
80-62-6	(intermittent releases)			
		10 /1		
methyl methacrylate 80-62-6	sewage treatment plant	10 mg/l		
80-62-6	*			
methyl methacrylate	(STP) sediment		5,74 mg/kg	+
80-62-6	(freshwater)		3,74 mg/kg	
methyl methacrylate	Soil		1,47 mg/kg	
80-62-6	3011		1,47 mg/kg	
methacrylic acid	aqua	0,82 mg/l		
79-41-4	(freshwater)	0,62 Hig/1		
methacrylic acid	Freshwater -	0,45 mg/l		
79-41-4	intermittent	0,45 mg/1		
methacrylic acid	aqua (marine	0,082 mg/l		
79-41-4	water)	0,002 mg/1		
methacrylic acid	sewage	100 mg/l		
79-41-4	treatment plant	100 1116/1		
	(STP)			
methacrylic acid	sediment		3,09 mg/kg	
79-41-4	(freshwater)		-,00	
methacrylic acid	sediment		0,309	
79-41-4	(marine water)		mg/kg	
methacrylic acid	Soil		0,137	
79-41-4			mg/kg	
methacrylic acid	Predator			no potential for
incuración de dela				
79-41-4				bioaccumulation

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	inhalation	Long term exposure - systemic effects		48,5 mg/m3	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	inhalation	Long term exposure - systemic effects		14,5 mg/m3	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	dermal	Long term exposure - systemic effects		8,33 mg/kg	no hazard identified
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	oral	Long term exposure - systemic effects		8,33 mg/kg	no hazard identified
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
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
Maleic acid 110-16-7	Workers	dermal	Acute/short term exposure - local effects			
Maleic acid 110-16-7	Workers	dermal	Long term exposure - local effects			
Maleic acid 110-16-7	Workers	dermal	Acute/short term exposure - systemic effects			
Maleic acid 110-16-7	Workers	dermal	Long term exposure - systemic effects			
Maleic acid 110-16-7	Workers	inhalation	Acute/short term exposure - local effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Long term exposure - systemic effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Long term exposure - local effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Acute/short term exposure - systemic effects		3 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	Workers	dermal	Long term exposure - systemic effects		1,3 mg/kg	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	Workers	Inhalation	Long term exposure - systemic effects		4,9 mg/m3	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	dermal	Long term exposure - systemic effects		0,83 mg/kg	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	Inhalation	Long term exposure - systemic effects		2,9 mg/m3	no potential for bioaccumulation
2-Hydroxyethyl methacrylate 868-77-9	General population	oral	Long term exposure -		0,83 mg/kg	no potential for bioaccumulation

			systemic effects		
methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - systemic effects	348,4 mg/m3	
methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects	208 mg/m3	
methyl methacrylate 80-62-6	Workers	inhalation	Acute/short term exposure - local effects	416 mg/m3	
methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - systemic effects	13,67 mg/kg	
methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - local effects	1,5 mg/cm2	
methyl methacrylate 80-62-6	Workers	dermal	Acute/short term exposure - local effects	1,5 mg/cm2	
methyl methacrylate 80-62-6	General population	Inhalation	Long term exposure - systemic effects	74,3 mg/m3	
methyl methacrylate 80-62-6	General population	Inhalation	Long term exposure - local effects	104 mg/m3	
methyl methacrylate 80-62-6	General population	inhalation	Acute/short term exposure - local effects 208 mg/m3		
methyl methacrylate 80-62-6	General population	dermal	Long term exposure - systemic effects	8,2 mg/kg	
methyl methacrylate 80-62-6	General population	dermal	Long term exposure - local effects	1,5 mg/cm2	
methyl methacrylate 80-62-6	General population	dermal	Acute/short term exposure - local effects	1,5 mg/cm2	
methyl methacrylate 80-62-6	General population	oral	Long term exposure - systemic effects		
methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - local effects	88 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects	29,6 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	Workers	dermal	Long term 4,25 mg/kg exposure - systemic effects		no potential for bioaccumulation
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - local effects	6,55 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - systemic effects	6,3 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	General population	dermal	Long term exposure - systemic effects	2,55 mg/kg	no potential for bioaccumulation

# **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.

Eve 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

Delivery form liquid
Colour red
Odor Acrylic
Physical state liquid

Melting point Not applicable, Product is a liquid

Solidification temperature < -30 °C (< -22 °F) Initial boiling point > 150 °C (> 302 °F)

Flammability The product is not flammable.

Explosive limits Not applicable, The product is not flammable.

Flash point  $> 100\,^{\circ}\mathrm{C}$  (> 212  $^{\circ}\mathrm{F}$ ) Auto-ignition temperature  $> 300\,^{\circ}\mathrm{C}$  (> 572  $^{\circ}\mathrm{F}$ )

Decomposition temperature Not applicable, Substance/mixture is not self-reactive, no organic

peroxide and does not decompose under foreseen conditions of use

Not applicable, Product is non-polar/aprotic.

Viscosity (kinematic) > 20,5 mm2/s (40 °C (104 °F); )

Viscosity, dynamic 15.000 - 25.000 mPa.s LCT STM 740; cone & plate viscosity

()

Solubility (qualitative) Insoluble

(20 °C (68 °F); Solvent: Water)
Solubility (qualitative)
Partially soluble

(Solvent: Acetone)

Partition coefficient: n-octanol/water Not applicable Mixture

Vapour pressure < 0.13 mbar  $(20 \,^{\circ}\text{C} (68 \,^{\circ}\text{F}))$ 

Density 1,05 - 1,1 g/cm3 None

(20 °C (68 °F)) Relative vapour density: >1

(20 °C)

Particle 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**

### 11.1 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
Polyethylene glycol monomethyl ether methacrylate 26915-72-0	Acute toxicity estimate (ATE)	> 5.000 mg/kg		Expert judgement
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	10.837 mg/kg	rat	not specified
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	382 mg/kg	rat	other guideline:
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	270 mg/kg	rat	not specified
maleic acid 110-16-7	LD50	708 mg/kg	rat	not specified
2-Hydroxyethyl methacrylate 868-77-9	LD50	5.564 mg/kg	rat	FDA Guideline
methyl methacrylate 80-62-6	LD50	9.400 mg/kg	rat	not specified
methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)

# 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			
Polyethylene glycol	Acute	> 5.000 mg/kg		Expert judgement
monomethyl ether	toxicity			
methacrylate	estimate			
26915-72-0	(ATE)			
2,2'-Ethylenedioxydiethyl	Acute	> 5.000 mg/kg		Expert judgement
dimethacrylate	toxicity			
109-16-0	estimate			
	(ATE)			
Hydroxypropyl	LD50	> 5.000 mg/kg	rabbit	not specified
methacrylate				•
27813-02-1				
Cumene hydroperoxide	Acute	1.100 mg/kg		Expert judgement
80-15-9	toxicity			
	estimate			
	(ATE)			
maleic acid	LD50	1.560 mg/kg	rabbit	not specified
110-16-7				
2-Hydroxyethyl	LD50	> 5.000 mg/kg	rabbit	not specified
methacrylate				
868-77-9				
methyl methacrylate	LD50	> 5.000 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute
80-62-6				Dermal Toxicity)
methacrylic acid	LD50	500 - 1.000	rabbit	Dermal Toxicity Screening
79-41-4		mg/kg		
methacrylic acid	Acute	500 mg/kg		Expert judgement
79-41-4	toxicity			
	estimate			
	(ATE)			

## 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		
Polyethylene glycol	Acute	> 5 mg/l	dust/mist			Expert judgement
monomethyl ether	toxicity					
methacrylate	estimate					
26915-72-0	(ATE)					
2,2'-Ethylenedioxydiethyl	Acute	28,17 mg/l	dust/mist			Expert judgement
dimethacrylate	toxicity					
109-16-0	estimate					
	(ATE)					
Cumene hydroperoxide	LC50	1,370 mg/l	vapour	4 h	rat	not specified
80-15-9						
methyl methacrylate	LC50	29,8 mg/l	vapour	4 h	rat	not specified
80-62-6						
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	Result	Exposure	Species	Method
CAS-No.		time		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating	24 h	rabbit	Draize Test
Hydroxypropyl methacrylate 27813-02-1	not irritating	24 h	rabbit	Draize Test
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
maleic acid 110-16-7	irritating	24 h	human	Patch Test
2-Hydroxyethyl methacrylate 868-77-9	slightly irritating	24 h	rabbit	Draize Test
methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

## Serious eye damage/irritation:

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

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
2,2'-Ethylenedioxydiethyl	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
dimethacrylate				
109-16-0				
Hydroxypropyl	Category 2B		rabbit	Draize Test
methacrylate	(mildly			
27813-02-1	irritating to			
	eyes)			
maleic acid	highly		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
110-16-7	irritating			
2-Hydroxyethyl	Category 2B		rabbit	Draize Test
methacrylate	(mildly			
868-77-9	irritating to			
	eyes)			
methacrylic acid	corrosive		rabbit	Draize Test
79-41-4				

# 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
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	guinea pig	OECD Guideline 406 (Skin Sensitisation)
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
methyl methacrylate 80-62-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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
2.21 Eduation di anni di adant		mammalian cell			OECD Guideline 476 (In vitro
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative	gene mutation assay	with and without		Mammalian Cell Gene Mutation Test)
2,2'-Ethylenedioxydiethyl dimethacrylate	negative	bacterial reverse mutation assay (e.g	with and without		OECD Guideline 471 (Bacterial Reverse Mutation
109-16-0		Ames test)			Assay)
2,2'-Ethylenedioxydiethyl dimethacrylate	negative	in vitro mammalian cell micronucleus	with and without		OECD Guideline 487 (In vitro Mammalian Cell
109-16-0		test			Micronucleus Test)
Hydroxypropyl methacrylate	negative	bacterial reverse mutation assay (e.g	with and without		OECD Guideline 471 (Bacterial Reverse Mutation
27813-02-1		Ames test)			Assay)
Hydroxypropyl methacrylate 27813-02-1	positive	in vitro mammalian chromosome aberration test	with and without		Chromosome Aberration Test
Hydroxypropyl	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
methacrylate 27813-02-1	negative	gene mutation assay	with and without		Mammalian Cell Gene Mutation Test)
Cumene hydroperoxide	positive	bacterial reverse	without		OECD Guideline 471
80-15-9		mutation assay (e.g Ames test)			(Bacterial Reverse Mutation Assay)
maleic acid	negative	bacterial reverse	no data		Ames Test
110-16-7		mutation assay (e.g Ames test)			
maleic acid	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
110-16-7		gene mutation assay			Mammalian Cell Gene Mutation Test)
2-Hydroxyethyl	negative	bacterial reverse	with and without		OECD Guideline 471
methacrylate		mutation assay (e.g			(Bacterial Reverse Mutation
868-77-9		Ames test)	1.1 1 1.1		Assay)
2-Hydroxyethyl	positive	in vitro mammalian chromosome	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome
methacrylate 868-77-9		aberration test			Aberration Test)
2-Hydroxyethyl	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
methacrylate 868-77-9	negative	gene mutation assay	with and without		Mammalian Cell Gene Mutation Test)
methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
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)
Hydroxypropyl	negative	oral: gavage		mouse	OECD Guideline 474
methacrylate 27813-02-1	neganive	oran gavage		ino use	(Mammalian Erythrocyte Micronucleus Test)
Hydroxypropyl methacrylate 27813-02-1	negative	oral: gavage		Drosophila melanogaster	not specified
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	not specified
2-Hydroxyethyl methacrylate	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte
868-77-9	ļ			1	Micronucleus Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	oral: gavage		Drosophila melanogaster	not specified
methacrylic acid 79-41-4	negative	inhalation		mouse	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
methacrylic acid 79-41-4	negative	oral: gavage		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# 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 y 6 h/d, 5 d/w	rat	male	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
maleic acid 110-16-7	not carcinogenic	oral: feed	2 y daily	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
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)
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	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL P 1.000 mg/kg NOAEL F1 1.000 mg/kg		oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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)
maleic acid 110-16-7	NOAEL F1 150 mg/kg NOAEL F2 55 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL P >= $1.000 \text{ mg/kg}$ NOAEL F1 >= $1.000 \text{ mg/kg}$	screening	oral: gavage	rat	equivalent or similar to OECD Guideline 422 (Combined Repeated Dose 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
2,2'-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)
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)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
maleic acid 110-16-7	NOAEL >= 40 mg/kg	oral: feed	90 d daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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)
methyl methacrylate 80-62-6	LOAEL 2000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
methyl methacrylate 80-62-6	NOAEL 1000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
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.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2,2'-Ethylenedioxydiethyl	LC50	16,4 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
dimethacrylate					Acute Toxicity Test)
109-16-0					
Hydroxypropyl methacrylate	LC50	493 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
27813-02-1					
Cumene hydroperoxide	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
80-15-9					Acute Toxicity Test)
maleic acid	LC50	> 245 mg/l	48 h	Leuciscus idus	DIN 38412-15
110-16-7					
2-Hydroxyethyl methacrylate	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish,
868-77-9					Acute Toxicity Test)
methyl methacrylate	LC50	350 mg/l	96 h	Leuciscus idus	OECD Guideline 203 (Fish,
80-62-6					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)
methacrylic acid	NOEC	10 mg/l	35 d	Danio rerio	OECD Guideline 210 (fish
79-41-4					early lite stage toxicity test)

## **Toxicity (aquatic invertebrates):**

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

The table below presents the data of 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)
Cumene hydroperoxide 80-15-9	EC50	18,84 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
maleic acid 110-16-7	EC50	42,81 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	380 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
methyl methacrylate 80-62-6	EC50	69 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
methacrylic acid 79-41-4	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)

### Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2,2'-Ethylenedioxydiethyl	NOEC	32 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia

dimethacrylate 109-16-0					magna, Reproduction Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	45,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
maleic acid 110-16-7	NOEC	10 mg/l	21 d	Daphnia magna	other guideline:
2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
methyl methacrylate 80-62-6	NOEC	37 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
methacrylic acid 79-41-4	NOEC	53 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

# **Toxicity (Algae):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2,2'-Ethylenedioxydiethyl dimethacrylate	EC50	> 100 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
109-16-0					Growth minorition Test)
2,2'-Ethylenedioxydiethyl	NOEC	18,6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
dimethacrylate					Growth Inhibition Test)
109-16-0	EC50	07.0 //	70.1	D 11' 1 '11 1 '44	OEGD G 1111 201 (A1
Hydroxypropyl methacrylate 27813-02-1	EC50	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate	NOEC	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
27813-02-1					Growth Inhibition Test)
Cumene hydroperoxide	EC50	3,1 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga,
80-15-9				(reported as Scenedesmus	Growth Inhibition Test)
Cumene hydroperoxide	NOEC	1 mg/l	72 h	subspicatus) Desmodesmus subspicatus	OECD Guideline 201 (Alga,
80-15-9	NOEC	1 IIIg/1	/ 2 II	(reported as Scenedesmus	Growth Inhibition Test)
80-13-9				subspicatus)	Growth minordon Test)
maleic acid	EC50	74,35 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
110-16-7				-	Growth Inhibition Test)
maleic acid	EC10	11,8 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
110-16-7					Growth Inhibition Test)
2-Hydroxyethyl methacrylate	EC50	836 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
868-77-9				(new name: Pseudokirchneriella	Growth Inhibition Test)
				subcapitata)	
2-Hydroxyethyl methacrylate	NOEC	400 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
868-77-9				(new name: Pseudokirchneriella	Growth Inhibition Test)
	5050	150 5	0.61	subcapitata)	0707 0 11 11 001 (11
methyl methacrylate	EC50	170 mg/l	96 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
80-62-6				(new name: Pseudokirchneriella	Growth Inhibition Test)
methyl methacrylate	NOEC	100 mg/l	96 h	subcapitata) Selenastrum capricornutum	OECD Guideline 201 (Alga,
80-62-6	NOEC	100 mg/1	90 11	(new name: Pseudokirchneriella	
80-02-0				subcapitata)	Growth minorition Test)
methacrylic acid	NOEC	8,2 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
79-41-4				(new name: Pseudokirchneriella	Growth Inhibition Test)
				subcapitata)	
methacrylic acid	EC50	45 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
79-41-4				(new name: Pseudokirchneriella	Growth Inhibition Test)
				subcapitata)	

# **Toxicity (microorganisms):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_	_	
Hydroxypropyl methacrylate 27813-02-1	EC10	1.140 mg/l	16 h		not specified
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	30 min	not specified	not specified
maleic acid 110-16-7	EC10	44,6 mg/l	18 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:
methyl methacrylate 80-62-6	EC20	> 150 - 200 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
methacrylic acid 79-41-4	EC10	100 mg/l	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)

# 12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	28 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
maleic acid 110-16-7	readily biodegradable	aerobic	97,08 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
methyl methacrylate 80-62-6	readily biodegradable	aerobic	94 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	14 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)

# 12.3. Bioaccumulative potential

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Cumene hydroperoxide	9,1			calculation	OECD Guideline 305
80-15-9					(Bioconcentration: Flow-through
					Fish Test)

#### 12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	LogPow	Temperature	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	2,3		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Hydroxypropyl methacrylate 27813-02-1	0,97	20 °C	not specified
Cumene hydroperoxide 80-15-9	1,6	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74		not specified
maleic acid 110-16-7	-1,3	20 °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)
methyl methacrylate 80-62-6	1,38	20 °C	other guideline:
methacrylic acid 79-41-4	0,93	22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	PBT / vPvB		
CAS-No.			
2,2'-Ethylenedioxydiethyl dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
109-16-0	Bioaccumulative (vPvB) criteria.		
Hydroxypropyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
27813-02-1	Bioaccumulative (vPvB) criteria.		
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
80-15-9	Bioaccumulative (vPvB) criteria.		
maleic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
110-16-7	Bioaccumulative (vPvB) criteria.		
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
868-77-9	Bioaccumulative (vPvB) criteria.		
methyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very		
80-62-6	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:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

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

#### 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

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

## 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.7. 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

< 3 %

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)

## 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:

H225 Highly 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 eve irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H411 Toxic to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL:

EU EXPLD 1:

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:**

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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.

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