

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

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LOCTITE AA 3211 LC known as 3211 Adhesive

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

1.1. Product identifier

LOCTITE AA 3211 LC known as 3211 Adhesive

- **1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use: Ultraviolet adhesive
- **1.3. Details of the supplier of the safety data sheet** Henkel Ltd Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

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

ua-productsafety.uk@henkel.com

## **1.4. Emergency telephone number**

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

## **SECTION 2: Hazards identification**

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

Classification (CLP):	
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	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

#### 2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Contains	Isobornyl acrylate
	2-Hydroxyethyl methacrylate
	Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 2-Hydroxyethyl acrylate
Signal word:	Warning
Hazard statement:	<ul> <li>H315 Causes skin irritation.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H319 Causes serious eye irritation.</li> <li>H335 May cause respiratory irritation.</li> <li>H410 Very toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statement:	"***" ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	<ul><li>P261 Avoid breathing vapors.</li><li>P273 Avoid release to the environment.</li><li>P280 Wear protective gloves.</li></ul>
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: 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.

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

#### 3.2. Mixtures

General chemical description: UV curing acrylic adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Isobornyl acrylate 5888-33-5	227-561-6 01-2119957862-25	20- 40 %	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335 Skin Sens. 1B H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
2-Hydroxyethyl methacrylate 868-77-9	212-782-2 01-2119490169-29	10- 20 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319
Ethanone, 2,2-dimethoxy-1,2-diphenyl- 24650-42-8	246-386-6 01-2120000336-73	1-< 3%	Aquatic Chronic 1 H410 Aquatic Acute 1 H400
[3-(2,3- Epoxypropoxy)propy1]trimethoxysilane 2530-83-8	219-784-2 01-2119513212-58	1-< 3 %	Eye Dam. 1 H318
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 75980-60-8	278-355-8 01-2119972295-29	1-< 3 %	Repr. 2 H361f Aquatic Chronic 2 H411 Skin Sens. 1B H317
Camphene 79-92-5	201-234-8	0,1-< 1%	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Flam. Sol. 2 H228 Eye Irrit. 2 H319
1,7,7-Trimethyltricyclo[2.2.1.02,6]heptane 508-32-7	208-083-7, 208- 083-7	0,1-< 1 %	Eye Irrit. 2 H319 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
methacrylic acid 79-41-4	201-204-4 01-2119463884-26	0,1-< 1%	Acute Tox. 4 H302 Acute Tox. 3 H311 Acute Tox. 4 H332 Skin Corr. 1A H314 Eye Dam. 1 H318 STOT SE 3 H335
2-Hydroxyethyl acrylate 818-61-1	212-454-9 01-2119459345-34	0,02-< 0,2 %	Acute Tox. 4 H302 Acute Tox. 3 H311 Skin Corr. 1B H314 Skin Sens. 1 H317 Aquatic Acute 1 H400 Aquatic Chronic 3

	H412

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: Seek medical advice. IF ON SKIN: Wash with plenty of soap and water.

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

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

**4.2. Most important symptoms and effects, both acute and delayed** EYE: Irritation, conjunctivitis.

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

**4.3. Indication of any immediate medical attention and special treatment needed** See section: Description of first aid measures

## **SECTION 5: Firefighting measures**

**5.1. Extinguishing media Suitable extinguishing media:** Carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:** None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released. **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 skin and eye contact. Ensure adequate ventilation. Wear protective equipment.

#### **6.2.** Environmental precautions

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

## 6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal. Dispose of contaminated material as waste according to Section 13.

#### 6.4. Reference to other sections

See advice in section 8

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Use only in well-ventilated areas. Avoid skin and eye contact. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. See advice in section 8

Hygiene measures:

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

## 7.2. Conditions for safe storage, including any incompatibilities

Refer to Technical Data Sheet

**7.3. Specific end use(s)** Ultraviolet adhesive

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

## 8.1. Control parameters

## **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ррт	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
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL

## **Occupational Exposure Limits**

Valid for Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	70	Time Weighted Average (TWA):		IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	140	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

## Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks	
	<b>F</b>	periou	mg/l	ppm	mg/kg	others		
Isobornyl acrylate 5888-33-5	aqua (freshwater)		0,00092 mg/l					
Isobornyl acrylate 5888-33-5	aqua (marine water)		0,000092 mg/l					
Isobornyl acrylate 5888-33-5	sewage treatment plant (STP)		2 mg/l					
Isobornyl acrylate 5888-33-5	aqua (intermittent releases)		0,00704 mg/l					
Isobornyl acrylate 5888-33-5	sediment (freshwater)				0,145 mg/kg			
Isobornyl acrylate 5888-33-5	sediment (marine water)				0,0145 mg/kg			
Isobornyl acrylate 5888-33-5	Soil				0,0285 mg/kg			
Isobornyl acrylate 5888-33-5	Air						no hazard identified	
Isobornyl acrylate 5888-33-5	Predator						no potential for bioaccumulation	
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)		0,482 mg/l					
2-Hydroxyethyl methacrylate 868-77-9	aqua (marine water)		0,482 mg/l					
2-Hydroxyethyl methacrylate 868-77-9	sewage treatment plant (STP)		10 mg/l					
2-Hydroxyethyl methacrylate 868-77-9	aqua (intermittent releases)		1 mg/l					
2-Hydroxyethyl methacrylate 868-77-9	sediment (freshwater)				3,79 mg/kg			
2-Hydroxyethyl methacrylate 868-77-9	sediment (marine water)				3,79 mg/kg			
2-Hydroxyethyl methacrylate 868-77-9	Soil				0,476 mg/kg			
2-Hydroxyethyl methacrylate 868-77-9	Predator						no potential for bioaccumulation	
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	aqua (freshwater)		0,229 mg/l					
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	aqua (intermittent releases)		0,184 mg/l					
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	aqua (marine water)		0,0229 mg/l					
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	sewage treatment plant (STP)		19,4 mg/l					
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	sediment (freshwater)				8,87 mg/kg			
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	sediment (marine water)				0,887 mg/kg			
2,2-Dimethoxy-1,2-diphenylethan-1-one 24650-42-8	Soil				1,64 mg/kg			
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	aqua (freshwater)		1 mg/l					
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	aqua (marine water)		0,1 mg/l					
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	aqua (intermittent releases)		1 mg/l					
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	Soil				0,14 mg/kg			
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	sewage treatment plant (STP)		10 mg/l					

[3-(2,3-	sediment	1 1	3,6 mg/kg	1
[5-(2,5- Epoxypropoxy)propyl]trimethoxysilane	(freshwater)		5,0 mg/kg	
2530-83-8	(inconvator)			
[3-(2,3-	sediment		0,36 mg/kg	
Epoxypropoxy)propyl]trimethoxysilane	(marine water)		0,50 mg/kg	
2530-83-8	` ´	0.00050		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua	0,00353		
oxide 75980-60-8	(freshwater)	mg/l		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua (marine	0.000353		
oxide	water)	- ,		
75980-60-8	water)	mg/l		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua	0.0353		
oxide	(intermittent	mg/l		
75980-60-8	releases)	iiig/1		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment		0,29 mg/kg	
oxide	(freshwater)		0,29 mg/kg	
75980-60-8	(inconvator)			
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment		0.029	
oxide	(marine water)		mg/kg	
75980-60-8	(inaline water)			
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Soil		0.0557	
oxide			mg/kg	
75980-60-8			00	
methacrylic acid	aqua	0,82 mg/l		
79-41-4	(freshwater)			
methacrylic acid	aqua (marine	0,82 mg/l		
79-41-4	water)			
methacrylic acid	sewage	10 mg/l		
79-41-4	treatment plant	_		
	(STP)			
methacrylic acid	aqua	0,82 mg/l		
79-41-4	(intermittent			
	releases)			
methacrylic acid	Soil		1,2 mg/kg	
79-41-4				
2-Hydroxyethyl acrylate	aqua	0,017 mg/l		
818-61-1	(freshwater)			
2-Hydroxyethyl acrylate	aqua (marine	0,002 mg/l		
818-61-1	water)			
2-Hydroxyethyl acrylate	aqua	0,036 mg/l		
818-61-1	(intermittent			
	releases)		0.054	
2-Hydroxyethyl acrylate 818-61-1	sediment		0,064	
2-Hydroxyethyl acrylate	(freshwater)		mg/kg	
2-Hydroxyethyl acrylate 818-61-1	sediment (marine water)		0,006 mg/kg	
2-Hydroxyethyl acrylate	(marine water) Soil		0.003	
818-61-1	3011		- ,	
2-Hydroxyethyl acrylate	Sewage	10 mg/l	mg/kg	
818-61-1	Sewage treatment plant	10 mg/1		
2-Hydroxyethyl acrylate	Air			no hazard identified
818-61-1	A11			no nazaru luenuneu
010 01-1			I	

## Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Isobornyl acrylate 5888-33-5	Workers	dermal	Long term exposure - systemic effects		1,39 mg/kg	no hazard identified
Isobornyl acrylate 5888-33-5	General population	oral	Long term exposure - systemic effects		0,83 mg/kg	no hazard identified
Isobornyl acrylate 5888-33-5	General population	dermal	Long term exposure - systemic effects		0,83 mg/kg	no hazard identified
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
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	Workers	dermal	Long term exposure - systemic effects		21 mg/kg	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	Workers	Inhalation	Long term exposure - systemic effects		147 mg/m3	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	General population	inhalation	Long term exposure - systemic effects		43,5 mg/m3	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	General population	dermal	Long term exposure - systemic effects		12,5 mg/kg	
[3-(2,3- Epoxypropoxy)propyl]trimethoxysilane 2530-83-8	General population	oral	Long term exposure - systemic effects		12,5 mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	Workers	inhalation	Long term exposure - systemic effects		3,5 mg/m3	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	Workers	dermal	Long term exposure - systemic effects		1 mg/kg	
methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - local effects		88 mg/m3	
methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects		29,6 mg/m3	
methacrylic acid 79-41-4	Workers	dermal	Long term exposure - systemic effects		4,25 mg/kg	
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - local effects		6,55 mg/m3	
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - systemic effects		6,3 mg/m3	
methacrylic acid 79-41-4	General population	dermal	Long term exposure - systemic effects		2,55 mg/kg	
2-Hydroxyethyl acrylate 818-61-1	Workers	inhalation	Long term exposure - local effects		2,4 mg/m3	no hazard identified
2-Hydroxyethyl acrylate 818-61-1	General population	inhalation	Long term exposure - local effects		1,2 mg/m3	no hazard identified

#### **Biological Exposure Indices:** None

#### 8.2. Exposure controls:

Engineering controls:

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

Respiratory protection: Suitable breathing mask when there is inadequate ventilation. Suitable respiratory protection: 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;  $\geq 0.4$  mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR;  $\geq 0.4$  mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection: Wear protective glasses. Protective eye equipment should conform to EN166.

Skin protection: Wear suitable protective clothing. Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

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

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

#### 9.1. Information on basic physical and chemical properties Appearance liquid Clear Odor mild Odour threshold No data available / Not applicable pН No data available / Not applicable Melting point No data available / Not applicable Solidification temperature No data available / Not applicable Initial boiling point > 93 °C (> 199.4 °F) 86 °C (186.8 °F); Pensky Martens closed cup Flash point Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable Vapour pressure 6.67 mbar Relative vapour density: No data available / Not applicable Density 1,1642 g/cm3 () Bulk density No data available / Not applicable Solubility No data available / Not applicable

Solubility (qualitative) (Solvent: Water) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity (; Shear gradient: 15 s-1) Viscosity (kinematic) Explosive properties Oxidising properties

## 9.2. Other information

No data available / Not applicable

#### Slight

No data available / Not applicable No data available / Not applicable No data available / Not applicable 25 mPa.s

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

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Reaction with strong acids. Reacts with strong oxidants.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

# **10.4. Conditions to avoid** Stable

**10.5. Incompatible materials** See section reactivity.

**10.6. Hazardous decomposition products** carbon oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### Acute oral toxicity:

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

Hazardous substances CAS-No.	Value type	Value	Species	Method
Isobornyl acrylate 5888-33-5	LD50	4.350 mg/kg	rat	not specified
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rat	not specified
Ethanone, 2,2-dimethoxy- 1,2-diphenyl- 24650-42-8	LD50	> 5.000 mg/kg	rat	not specified
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LD50	8.025 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Camphene 79-92-5	LD50	>= 5.000 mg/kg	rat	Limit Test
methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-Hydroxyethyl acrylate 818-61-1	LD50	540 mg/kg	rat	not specified

## Acute dermal toxicity:

Hazardous substances CAS-No.	Value type	Value	Species	Method
Isobornyl acrylate 5888-33-5	LD50	> 3.000 mg/kg	rabbit	other guideline:
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rabbit	not specified
Ethanone, 2,2-dimethoxy- 1,2-diphenyl- 24650-42-8	LD50	> 5.000 mg/kg	rat	not specified
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LD50	4.250 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening

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

## Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
[3-(2,3-	LC50	> 5,3 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
Epoxypropoxy)propyl]tri						Inhalation Toxicity)
methoxysilane						-
2530-83-8						
methacrylic acid	LC50	> 3,6 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
79-41-4		-				Inhalation Toxicity)

#### 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		
Isobornyl acrylate	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
5888-33-5				
[3-(2,3-	not irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Epoxypropoxy)propyl]tri	_			
methoxysilane				
2530-83-8				
Diphenyl-2,4,6-	not irritating	24 h	rabbit	not specified
trimethylbenzoyl				
phosphine oxide				
75980-60-8				
Camphene	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
79-92-5	_			
methacrylic acid	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
79-41-4				

## 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-Hydroxyethyl	irritating		rabbit	Draize Test
methacrylate				
868-77-9				
[3-(2,3-	highly	20 s	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Epoxypropoxy)propyl]tri	irritating			
methoxysilane	Ū.			
2530-83-8				
Diphenyl-2,4,6-	not irritating		rabbit	not specified
trimethylbenzoyl	_			
phosphine oxide				
75980-60-8				
Camphene	irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
79-92-5	Ũ			
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
Isobornyl acrylate 5888-33-5	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	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	OECD Guideline 406 (Skin Sensitisation)
2-Hydroxyethyl acrylate 818-61-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	not specified

## Germ cell mutagenicity:

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

Hazardous substances	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of administration	activation / Exposure time		
Isobornyl acrylate 5888-33-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Isobornyl acrylate 5888-33-5	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Isobornyl acrylate 5888-33-5	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2-Hydroxyethyl methacrylate 868-77-9	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2-Hydroxyethyl methacrylate 868-77-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	A mutagenic potential can not be excluded.		with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2-Hydroxyethyl acrylate 818-61-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
2-Hydroxyethyl methacrylate 868-77-9	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	A mutagenic potential can not be excluded.			mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Camphene 79-92-5	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
methacrylic acid 79-41-4	negative	inhalation		mouse	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
2-Hydroxyethyl acrylate 818-61-1	negative	oral: gavage		mouse	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
2-Hydroxyethyl methacrylate 868-77-9		inhalation	102 weeks 6 hours/day, 5 days/week	rat	female	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 CAS-No.	Result / Value	Test type	Route of application	Species	Method
Isobornyl acrylate 5888-33-5	NOAEL P 100 mg/kg NOAEL F1 100 mg/kg		oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL P >= 1.000 mg/kg NOAEL F1 >= 1.000 mg/kg	screening	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
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
Isobornyl acrylate 5888-33-5	NOAEL 100 mg/kg	oral: gavage	once daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL 100 mg/kg	oral: gavage	once daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	NOAEL 500 mg/kg	oral: unspecified	28 d	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	NOAEL 0,225 mg/kg	inhalation	14 d	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	NOAEL 100 mg/kg	oral: gavage	3 m 5 d/w	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Camphene 79-92-5	LOAEL 1.000 mg/kg	oral: gavage	28 days daily	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

## Aspiration hazard:

No data available.

## **SECTION 12: Ecological information**

## General ecological information:

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

## 12.1. Toxicity

## Toxicity (Fish):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Isobornyl acrylate	LC50	0,704 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
5888-33-5					Acute Toxicity Test)
2-Hydroxyethyl methacrylate	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish,
868-77-9					Acute Toxicity Test)
Ethanone, 2,2-dimethoxy-1,2-	LC50	7,2 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
diphenyl-					Acute Toxicity Test)
24650-42-8					
[3-(2,3-	LC50	55 mg/l	96 h	Cyprinus carpio	EU Method C.1 (Acute
Epoxypropoxy)propyl]trimeth					Toxicity for Fish)
oxysilane					
2530-83-8					
Diphenyl-2,4,6-	LC50	> 1 - 10 mg/l	48 h	Oryzias latipes	OECD Guideline 203 (Fish,
trimethylbenzoyl phosphine					Acute Toxicity Test)
oxide					
75980-60-8					
Camphene	LC50	0,72 mg/l	96 h	Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
79-92-5				Danio rerio)	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)
2-Hydroxyethyl acrylate	LC50	4,8 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
818-61-1					Acute Toxicity Test)

## Toxicity (Daphnia):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Isobornyl acrylate 5888-33-5	EC50	1 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)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	EC50	26 mg/l	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC50	324 mg/l	48 h	Simocephalus vetulus	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	EC50	> 10 - 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Camphene 79-92-5	EC50	22 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
methacrylic acid 79-41-4	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
2-Hydroxyethyl acrylate 818-61-1	EC50	9,3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

## Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Isobornyl acrylate	NOEC	0,092 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
5888-33-5					magna, Reproduction Test)
2-Hydroxyethyl methacrylate	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
868-77-9					magna, Reproduction Test)
[3-(2,3-	NOEC	100 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
Epoxypropoxy)propyl]trimeth					magna, Reproduction Test)
oxysilane					
2530-83-8					
2-Hydroxyethyl acrylate	NOEC	0,86 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
818-61-1					magna, Reproduction Test)

Toxicity (Algae):

Growth Inhibition Test) OECD Guideline 201 (Alga

Growth Inhibition Test)

Pseudokirchneriella subcapitata

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Isobornyl acrylate 5888-33-5	NOEC	0,405 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga Growth Inhibition Test)
Isobornyl acrylate 5888-33-5	EC50	1,98 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	836 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	400 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethanone, 2,2-dimethoxy-1,2- diphenyl- 24650-42-8	EC50	0,17 mg/l	72 h	Scenedesmus sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC50	119 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga Growth Inhibition Test)
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	EC10	40 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	EC50	> 10 - 100 mg/l	72 h		OECD Guideline 201 (Alga Growth Inhibition Test)
Camphene 79-92-5	NOEC	320 - 580 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga Growth Inhibition Test)
Camphene 79-92-5	EC50	> 1.000 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	NOEC	8,2 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	EC50	45 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga Growth Inhibition Test)
2-Hydroxyethyl acrylate 818-61-1	EC50	6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga Growth Inhibition Test)
ATT 1	NOEG	4 4	70.1	D 1 1 1 1 1 1 1 1	OF CD C 111 001 (41

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

## Toxicity to microorganisms

NOEC

1 mg/l

2-Hydroxyethyl acrylate

818-61-1

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

72 h

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		-	-	
2-Hydroxyethyl methacrylate	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:
868-77-9					
Ethanone, 2,2-dimethoxy-1,2-	EC 50	> 100 mg/l	3 h		OECD Guideline 209
diphenyl-					(Activated Sludge,
24650-42-8					Respiration Inhibition Test)
[3-(2,3-	NOEC	> 100 mg/l	3 h	activated sludge of a	OECD Guideline 209
Epoxypropoxy)propyl]trimeth				predominantly domestic sewage	(Activated Sludge,
oxysilane					Respiration Inhibition Test)
2530-83-8					
Diphenyl-2,4,6-	EC 50	> 1.000 mg/l	30 min		OECD Guideline 209
trimethylbenzoyl phosphine					(Activated Sludge,
oxide					Respiration Inhibition Test)
75980-60-8					
Camphene	EC10	490 mg/l	3 h		OECD Guideline 209
79-92-5					(Activated Sludge,
					Respiration Inhibition Test)
methacrylic acid	EC10	100 mg/l	17 h		not specified
79-41-4					
2-Hydroxyethyl acrylate	EC10	> 100 mg/l	72 h	activated sludge, domestic	other guideline:
818-61-1					

## 12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Isobornyl acrylate 5888-33-5	not readily biodegradable.	aerobic	57 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
[3-(2,3- Epoxypropoxy)propyl]trimeth oxysilane 2530-83-8	not readily biodegradable.	aerobic	37 %	28 d	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8			< 20 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Camphene 79-92-5	not readily biodegradable.	aerobic	5 %	10 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	14 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2-Hydroxyethyl acrylate 818-61-1	readily biodegradable	aerobic	> 79 - 80 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

## 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Isobornyl acrylate 5888-33-5	37	56 h	24 °C	Danio rerio	OECD Guideline 305 (Bioconcentration: Flow-through
					Fish Test)

## 12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.	U	-	
Isobornyl acrylate	4,52		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
5888-33-5			Method)
2-Hydroxyethyl methacrylate	0,42	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
868-77-9			Flask Method)
Ethanone, 2,2-dimethoxy-1,2-	3,42		not specified
diphenyl-			
24650-42-8			
[3-(2,3-	0,5	20 °C	QSAR (Quantitative Structure Activity Relationship)
Epoxypropoxy)propyl]trimeth			
oxysilane			
2530-83-8			
Camphene	4,35		not specified
79-92-5			
methacrylic acid	0,93	22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
79-41-4			Flask Method)
2-Hydroxyethyl acrylate	-0,17	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
818-61-1			Flask Method)

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

Hazardous substances	PBT / vPvB
CAS-No.	
Isobornyl acrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
5888-33-5	Bioaccumulative (vPvB) criteria.
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
868-77-9	Bioaccumulative (vPvB) criteria.
Ethanone, 2,2-dimethoxy-1,2-diphenyl-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
24650-42-8	Bioaccumulative (vPvB) criteria.
[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2530-83-8	Bioaccumulative (vPvB) criteria.
Diphenyl-2,4,6-trimethylbenzoyl phosphine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
oxide	Bioaccumulative (vPvB) criteria.
75980-60-8	
methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.
2-Hydroxyethyl acrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
818-61-1	Bioaccumulative (vPvB) criteria.

#### 12.6. Other adverse effects

No data available.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations. Collection and delivery to recycling enterprise or other registered elimination institution.

Disposal of uncleaned packages:

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

Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

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

# **SECTION 14: Transport information**

14.1.	UN number	c.		
•				
	ADR	3082		
	RID	3082		
	ADN	3082		
	IMDG	3082		
	IATA	3082		
14.2.	UN proper shipping name			
	ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one)		
	RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2-		
	ADN	Dimethoxy-1,2-diphenylethan-1-one) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2-		
		Dimethoxy-1,2-diphenylethan-1-one)		
	IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2- Dimethoxy-1,2-diphenylethan-1-one)		
	IATA	Environmentally hazardous substance, liquid, n.o.s. (2,2-Dimethoxy-1,2-		
	171171	diphenylethan-1-one)		
14.3.	Transport l	hazard class(es)		
	ADR	9		
	RID	9		
	ADN	9		
	IMDG	9		
	IATA	9		
14.4.	Packing group			
	ADR	III		
	RID	III		
	ADN	III		
	IMDG	III		
	IATA	III		
14.5.	Environme	ntal hazards		
	ADR	not applicable		
	RID	not applicable		
	ADN	not applicable		
	IMDG	Marine pollutant		
	IATA	not applicable		
14.6.	Special pre-	Special precautions for user		
	ADR	not applicable		
		Tunnelcode:		
	RID	not applicable		
	ADN	not applicable		
	IMDG	not applicable		
	IATA	not applicable		
	containers w kg for solid	rt classifications in this section apply generally to packed and bulk goods alike. For vith a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), ) may be applied, which can result in a deviation from the transport classification for packed		
	<b>B0000</b>			

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

## **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (2010/75/EC) < 3,00 %

#### 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:

H228 Flammable solid.

H302 Harmful if swallowed.

H311 Toxic 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.

H332 Harmful if inhaled.

H332 Hammul II milaleu.

H335 May cause respiratory irritation. H361f Suspected of damaging fertility.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

#### Further information:

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This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

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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: http://mymsds.de.henkelgroup.net/mymsds/.643691..en.ANNEX\_DE.34677269.0.DE.pdf Alternatively they can be accessed on the internet site www.mymsds.henkel.com by entering number 643691