

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

Page 1 of 20

## LOCTITE AA 3922

SDS No. : 174401 V012.0 Revision: 23.07.2019 printing date: 19.11.2020 Replaces version from: 28.03.2018

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

- **1.1. Product identifier** LOCTITE AA 3922
- **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):	
Acute toxicity	Category 4
H302 Harmful if swallowed.	
Route of Exposure: Oral	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
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-Propenamide, N,N-dimethyl- 2-Hydroxyethyl acrylate
	Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide
Signal word:	Danger
Hazard statement:	<ul> <li>H302 Harmful if swallowed.</li> <li>H315 Causes skin irritation.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H318 Causes serious eye damage.</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/eye protection.</li></ul>
Precautionary statement: Response	<ul> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P302+P352 IF ON SKIN: Wash with plenty of soap and water.</li> </ul>

### 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	25- 50 %	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-Propenamide, N,N-dimethyl- 2680-03-7	220-237-5 01-2119971262-39	2,5- < 25 %	Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Eye Dam. 1 H318
[3-(2,3- Epoxypropoxy)propyl]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
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
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
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. Consideration should be given to the possible effects of a faulty UV source (Stray radiation, ozone).

Skin contact: Rinse with running water and soap. Obtain medical attention if irritation persists.

### Eye contact:

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

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

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

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

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

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media:** Carbon dioxide, foam, powder

**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.

### **6.2.** Environmental precautions

Do not let product enter drains.

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

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal. Wash spillage site thoroughly with soap and water or detergent solution. Dispose of contaminated material as waste according to Section 13.

#### **6.4. Reference to other sections**

See advice in section 8

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

## 7.1. Precautions for safe handling

Use only in well-ventilated areas. Avoid skin and eye contact. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. Ventilation will remove any ozone that may be produced by the ultra violet lamp 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

None

#### **Occupational Exposure Limits**

Valid for Ireland

None

## Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure	Value				Remarks
	Compartment	periou	mg/l	ppm	mg/kg	others	
Isobornyl acrylate	agua		0.00092	ppm		others	
5888-33-5	(freshwater)		mg/l				
Isobornyl acrylate	aqua (marine		0,000092				
5888-33-5	water)		mg/l				
Isobornyl acrylate	sewage		2 mg/l				
5888-33-5	treatment plant						
	(STP)						
Isobornyl acrylate	aqua		0,00704				
5888-33-5	(intermittent		mg/l				
	releases)	-			0.145	-	
Isobornyl acrylate	(freehuuster)				0,145		
Jobornyl acrulate	(Iresilwater)	-		-	0.0145	-	
	(marine water)				0,0145 mg/kg		
Jobornyl acrylate	(Infamile water)				0.0285		
5888-33-5	3011				0,0285 mg/kg		
Isobornyl acrylate	Air				ing/kg		
5888-33-5	7 111						
Isobornyl acrylate	Predator						
5888-33-5							
N,N-Dimethylacrylamide	aqua		0,12 mg/l				
2680-03-7	(freshwater)						
N,N-Dimethylacrylamide	aqua (marine		0,012 mg/l				
2680-03-7	water)						
N,N-Dimethylacrylamide	aqua		1,2 mg/l				
2680-03-7	(intermittent						
	releases)						
N,N-Dimethylacrylamide	sediment				0,509		
2680-03-7	(freshwater)	-			mg/kg	-	
N,N-Dimethylacrylamide	sediment				0,0509		
2000-05-7	(Inarine water)				0.0212		
2680-03-7	5011				0,0515 mg/kg		
N N-Dimethylacrylamide	sewage		18 mg/l		iiig/kg		
2680-03-7	treatment plant		10 mg/1				
	(STP)						
N,N-Dimethylacrylamide	Predator						
2680-03-7							
[3-(2,3-	aqua		1 mg/l				
Epoxypropoxy)propyl]trimethoxysilane	(freshwater)		-				
2530-83-8							
[3-(2,3-	aqua (marine		0,1 mg/l				
Epoxypropoxy)propyl]trimethoxysilane	water)						
2530-83-8							
	aqua		1 mg/l				
Epoxypropoxy)propyI]trimetnoxysilane	(intermittent						
2350-65-6	Soil		1	-	0.12 mg/kg	-	
[3-(2,3- Epoxypropoxy)propylltrimethoxysilane	3011				0,15 mg/kg		
2530-83-8							
[3-(2.3-	sewage		10 mg/l				
Epoxypropoxy)propyl]trimethoxysilane	treatment plant						
2530-83-8	(STP)						
[3-(2,3-	sediment				3,6 mg/kg		
Epoxypropoxy)propyl]trimethoxysilane	(freshwater)						
2530-83-8							
[3-(2,3-	sediment				0,36 mg/kg		
Epoxypropoxy)propyl]trimethoxysilane	(marine water)						
2550-85-8			0.00252	+			
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua		0,00353				
0x10e 75980-60-8	(iresnwater)		mg/1				
Diphenvl(2.4.6-trimethylbenzovl)phosphine	aqua (marine		0.000353	+			
oxide	water)		mg/1				
75980-60-8							
Diphenyl(2,4,6-trimethylbenzovl)phosphine	aqua		0,0353	1			
oxide	(intermittent		mg/l				
75980-60-8	releases)		Ŭ				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment				0,29 mg/kg		

oxide	(freshwater)				
75980-60-8					
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment		0,029		
oxide	(marine water)		mg/kg		
75980-60-8					
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Soil		0,0557		
oxide			mg/kg		
75980-60-8					
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)				
2-Hydroxyethyl acrylate	sediment		0,064		
818-61-1	(freshwater)		mg/kg		
2-Hydroxyethyl acrylate	sediment		0,006		
818-61-1	(marine water)		mg/kg		
2-Hydroxyethyl acrylate	Soil		0,003		
818-61-1			mg/kg		
2-Hydroxyethyl acrylate	Sewage	10 mg/l			
818-61-1	treatment plant	-			
2-Hydroxyethyl acrylate	Air				
818-61-1					

## Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Isobornyl acrylate	Workers	dermal	Long term		1,39 mg/kg	
5888-33-5			exposure -			
			systemic effects			
Isobornyl acrylate	General	oral	Long term		0,83 mg/kg	
5888-33-5	population		exposure -			
Isohomyi oomiloto	Comorol	dammal	Systemic effects		0.92 ma/ka	
5888_33_5	General	dermai	Long term		0,85 mg/kg	
5000 55 5	population		systemic effects			
N.N-Dimethylacrylamide	Workers	dermal	Long term		0.357 mg/kg 357	
2680-03-7			exposure -		µg/kg bw/day	
			systemic effects			
N,N-Dimethylacrylamide	Workers	inhalation	Long term		0,207 mg/m3	
2680-03-7			exposure -			
NND' 4 1 1 1	C 1	1	systemic effects		0.0147 / 14.7	
N,N-Dimethylacrylamide	General	oral	Long term		0,014 / mg/kg 14, /	
2080-03-7	population		systemic effects		µg/kg 0w/day	
N.N-Dimethylacrylamide	General	dermal	Long term		0.179 mg/kg 179	
2680-03-7	population		exposure -		µg/kg bw/day	
			systemic effects		100	
N,N-Dimethylacrylamide	General	inhalation	Long term		0,051 mg/m3	
2680-03-7	population		exposure -			
12 (2.2	*** 1		systemic effects		0.1 7	
[3-(2,3-	Workers	dermal	Acute/short term		21 mg/kg	
2520 82 8			exposure -			
[3_(2 3_	Workers	Inhalation	Acute/short term		1/17 mg/m3	
Epoxypropoxy)propylltrimethoxysilane	WORKEIS	milation	exposure -		147 mg/m5	
2530-83-8			systemic effects			
[3-(2,3-	Workers	dermal	Long term		21 mg/kg	
Epoxypropoxy)propyl]trimethoxysilane			exposure -			
2530-83-8			systemic effects			
[3-(2,3-	Workers	Inhalation	Long term		147 mg/m3	
Epoxypropoxy)propyl]trimethoxysilane			exposure -			
[3 (2 3	General	inhalation	L ong term		13.5 mg/m3	
Epoxypropoxy)propylltrimethoxysilane	population	minatation	exposure -		45,5 mg/m5	
2530-83-8	population		systemic effects			
[3-(2,3-	General	inhalation	Acute/short term		43,5 mg/m3	
Epoxypropoxy)propyl]trimethoxysilane	population		exposure -		-	
2530-83-8			systemic effects			
[3-(2,3-	General	dermal	Long term		12,5 mg/kg	
Epoxypropoxy)propyl]trimethoxysilane	population		exposure -			
[3 (2 3	General	dermal	A cute/short term		12.5 mg/kg	
Epoxypropoxy)propylltrimethoxysilane	population	dermai	exposure -		12,5 mg/kg	
2530-83-8	population		systemic effects			
[3-(2,3-	General	oral	Long term		12,5 mg/kg	
Epoxypropoxy)propyl]trimethoxysilane	population		exposure -			
2530-83-8			systemic effects			
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Workers	inhalation	Long term		3,5 mg/m3	
			exposure -			
1,3700-00-0 Diphenvl(2,4,6_trimethylbenzovl)phosphine	Workers	dermal	Long term	+	1 mg/kg	
oxide	WUINCIS	uerman	exposure -		1 mg/kg	
75980-60-8			systemic effects			
2-Hydroxyethyl acrylate	Workers	inhalation	Long term		2,4 mg/m3	
818-61-1			exposure - local		_	
			effects			
2-Hydroxyethyl acrylate	General	inhalation	Long term		1,2 mg/m3	
818-61-1	population		exposure - local			
			effects			

#### Biological Exposure Indices: None

#### 8.2. Exposure controls:

Engineering controls:

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

Respiratory protection: Ensure adequate ventilation. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  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; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

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

Advices to personal protection equipment:

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

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

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
	light yellow
Odor	mild
Odour threshold	No data available / Not applicable
рН	No data available / Not applicable
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	> 93,3 °C (> 199.9 °F)
Flash point	73,9 °C (165.02 °F); Pensky Martens closed cup
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Relative vapour density:	No data available / Not applicable
Density	1,0945 g/cm3
0	-
Bulk density	No data available / Not applicable

Solubility	No data available / Not applicabl
Solubility (qualitative)	Slight
(Solvent: Water)	C C
Partition coefficient: n-octanol/water	No data available / Not applicabl
Auto-ignition temperature	No data available / Not applicabl
Decomposition temperature	No data available / Not applicabl
Viscosity	No data available / Not applicabl
Viscosity (kinematic)	No data available / Not applicabl
Explosive properties	No data available / Not applicabl
Oxidising properties	No data available / Not applicabl

## 9.2. Other information

No data available / Not applicable

le

le le le le le le le

## 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

No decomposition if used according to specifications. Protect from direct sunlight.

# **10.5. Incompatible materials**

See section reactivity.

## 10.6. Hazardous decomposition products

carbon oxides.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### Acute oral toxicity:

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	value	species	Nichlou .
Isobornyl acrylate	LD50	4.350 mg/kg	rat	not specified
5888-33-5				
2-Propenamide, N,N-	LD50	> 215 - 464	rat	OECD Guideline 401 (Acute Oral Toxicity)
dimethyl-		mg/kg		
2680-03-7				
[3-(2,3-	LD50	8.025 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Epoxypropoxy)propyl]tri				
methoxysilane				
2530-83-8				
Diphenyl-2,4,6-	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
trimethylbenzoyl				
phosphine oxide				
75980-60-8				
Camphene	LD50	>= 5.000 mg/kg	rat	Limit Test
79-92-5				
2-Hydroxyethyl acrylate	LD50	540 mg/kg	rat	not specified
818-61-1				

## Acute dermal 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	> 3.000 mg/kg	rabbit	other guideline:
2-Propenamide, N,N- dimethyl- 2680-03-7	LD50	500 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)

## 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- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	LC50	> 5,3 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute 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				
2-Propenamide, N,N-	not irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
dimethyl-				
2680-03-7				
[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				

## 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-Propenamide, N,N-	Category 1		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
dimethyl-	(irreversible			
2680-03-7	effects on the			
	eye)			
[3-(2,3-	highly	20 s	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Epoxypropoxy)propyl]tri	irritating			
methoxysilane				
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				•

## Respiratory or skin sensitization:

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

Hazardous substances	Result	Test type	Species	Method
Isobornyl acrylate 5888-33-5	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2-Propenamide, N,N- dimethyl- 2680-03-7	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
[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)
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
CA5-N0.		administration	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-Propenamide, N,N- dimethyl- 2680-03-7	negative		with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2-Propenamide, N,N- dimethyl- 2680-03-7	negative		with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
[3-(2,3- Epoxypropoxy)propyl]tri methoxysilane 2530-83-8	A mutagenic potential can not be excluded.	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
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)
2-Hydroxyethyl acrylate 818-61-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
2-Propenamide, N,N- dimethyl- 2680-03-7	negative	oral: gavage		mouse	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)
2-Hydroxyethyl acrylate 818-61-1	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

## Carcinogenicity

No data available.

## **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		
Isobornyl acrylate	NOAEL P 100 mg/kg		oral: gavage	rat	OECD Guideline 422
5888-33-5					(Combined Repeated Dose
	NOAEL F1 100 mg/kg				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)
2-Propenamide, N,N-	NOAEL P 5 mg/kg		oral: gavage	rat	OECD Guideline 421
dimethyl-					(Reproduction /
2680-03-7	NOAEL F1 30 mg/kg				Developmental Toxicity
					Screening Test)

## 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-Propenamide, N,N- dimethyl- 2680-03-7	NOAEL 10 mg/kg	dermal	13 weeks 6 hours/day, 7 days/week	rat	OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
[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-Propenamide, N,N-	LC50	> 120 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
dimethyl-					Acute Toxicity Test)
2680-03-7					
[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)
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	ĒČ50	1 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-Propenamide, N,N- dimethyl- 2680-03-7	EC50	> 120 mg/l	48 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)
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)
[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):

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	0,405 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
5888-33-5					Growth Inhibition Test)
Isobornyl acrylate	EC50	1,98 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
5888-33-5					Growth Inhibition Test)
2-Propenamide, N,N-	EC50	> 400 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
dimethyl-					Growth Inhibition Test)
2680-03-7					
2-Propenamide, N,N-	NOEC	50 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
dimethyl-					Growth Inhibition Test)
2680-03-7					
[3-(2,3-	EC50	119 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga,
Epoxypropoxy)propyl]trimeth					Growth Inhibition Test)
oxysilane					
2530-83-8					
[3-(2,3-	EC10	40 mg/l	7 d	Anabaena flos-aquae	OECD Guideline 201 (Alga,
Epoxypropoxy)propyl]trimeth					Growth Inhibition Test)
oxysilane					
2530-83-8					
Diphenyl-2,4,6-	EC50	> 10 - 100 mg/l	72 h		OECD Guideline 201 (Alga,
trimethylbenzoyl phosphine					Growth Inhibition Test)
oxide					
75980-60-8					
Camphene	NOEC	320 - 580 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
79-92-5				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	
Camphene	EC50	> 1.000 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
79-92-5				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	
2-Hydroxyethyl acrylate	EC50	6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
818-61-1					Growth Inhibition Test)
2-Hydroxyethyl acrylate	NOEC	1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
818-61-1					Growth Inhibition Test)

## Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2-Propenamide, N,N-	EC50	> 1.000 mg/l	3 h	activated sludge, domestic	OECD Guideline 209
dimethyl-					(Activated Sludge,
2680-03-7					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)
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.

Г <u></u>	l	-		1 -	
Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
Isobornyl acrylate	not readily biodegradable.	aerobic	57 %	28 d	OECD Guideline 310 (Ready
5888-33-5					BiodegradabilityCO2 in Sealed
					Vessels (Headspace Test)
2-Propenamide, N,N-	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 C (Ready
dimethyl-					Biodegradability: Modified MITI
2680-03-7					Test (I))
[3-(2,3-	not readily biodegradable.	aerobic	37 %	28 d	OECD Guideline 301 A (new
Epoxypropoxy)propyl]trimeth					version) (Ready Biodegradability:
oxysilane					DOC Die Away Test)
2530-83-8					
Diphenyl-2,4,6-			< 20 %	28 d	OECD Guideline 301 F (Ready
trimethylbenzoyl phosphine					Biodegradability: Manometric
oxide					Respirometry Test)
75980-60-8					
Camphene	not readily biodegradable.	aerobic	5 %	10 d	OECD Guideline 301 F (Ready
79-92-5					Biodegradability: Manometric
					Respirometry Test)
2-Hydroxyethyl acrylate	readily biodegradable	aerobic	> 79 - 80 %	28 d	OECD Guideline 301 B (Ready
818-61-1					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.			
Isobornyl acrylate	4,52		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
5888-33-5			Method)
2-Propenamide, N,N-	< 0,3	23 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
dimethyl-			Method)
2680-03-7			
[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			
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-Propenamide, N,N-dimethyl-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2680-03-7	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	
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			
	ADR	3082		
	RID	3082		
		3082		
	IMDG	3082		
		3082		
	IAIA	5082		
14.2.	UN proper shipping name			
	ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl		
	RID	acrylate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl		
		acrylate)		
	ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl		
	IMDG	acrylate) ENVIDONMENTALLY HAZADDOUS SUBSTANCE LIQUID N.O.S. (Isoborny)		
	INDO	acrylate)		
	IATA	Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate)		
14.3.	Transport hazard class(es)			
	ADR	9		
	RID	9		
	ADN	9		
	IMDG	9		
	IATA	9		
14.4.	Packing gro	սթ		
	ADR	III		
	RID	III		
	ADN	III		
	IMDG	III		
	IATA	III		
14.5.	Environmental hazards			
	ADR	not applicable		
	RID	not applicable		
	ADN	not applicable		
	IMDG	Marine pollutant		
	IATA	not applicable		
14.6.	Special prec	Special precautions for user		

ADR not applicable

	Tunnelcode:
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

### 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.

H301 Toxic if swallowed.

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.

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:**

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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

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.