

# Sicherheitsdatenblatt



**Produkt:** IND475

**Hersteller:** HENKEL KGAA

**Warengruppe:** 3DP

**Artikelgruppe:** 3DP RESINS

**Download:** 24.01.2022

## LOCTITE 3D IND475 A60 HIGH REBOUND WHITE

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

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LOCTITE 3D IND475 A60 HIGH REBOUND

SDS No. : 695180  
V002.0

Revision: 06.09.2021  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

LOCTITE 3D IND475 A60 HIGH REBOUND

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

Intended use:

Acrylics

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

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

Fax-no.: +49 211 798 2009

ua-productsafety.de@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or [www.henkel-adhesives.com](http://www.henkel-adhesives.com).

#### 1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

### 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.	
Toxic to reproduction	Category 2
H361f Suspected of damaging fertility.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Specific target organ toxicity - repeated exposure	Category 1
H372 Causes damage to organs through prolonged or repeated exposure.	
Chronic hazards to the aquatic environment	Category 2
H411 Toxic to aquatic life with long lasting effects.	

**2.2. Label elements****Label elements (CLP):****Contains**

2H-Azepin-2-one, 1-ethenylhexahydro-

Aliphatic Urethane Acrylate Oligomer

2-Propenoic acid, dodecyl ester

Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone

Ethylphenyl(2,4,6-trimethylbenzoyl)phosphinate

Reaction mass of pentamethyl-4-piperidylsebacates

Triacrylate ester

2-Hydroxyethyl methacrylate

Trimethylolpropane triacrylate

<b>Signal word:</b>	<b>Danger</b>
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<b>Hazard statement:</b>	<p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H361f Suspected of damaging fertility.</p> <p>H372 Causes damage to organs through prolonged or repeated exposure.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
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<b>Precautionary statement:</b>	P261 Avoid breathing vapors.
<b>Prevention</b>	P280 Wear protective gloves/protective clothing.
	P273 Avoid release to the environment.

<b>Precautionary statement:</b>	P302+P352 IF ON SKIN: Wash with plenty of soap and water.
<b>Response</b>	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**

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Aliphatic Urethane Acrylate Oligomer		20- 40 %	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335
2H-Azepin-2-one, 1-ethenylhexahydro- 2235-00-9	218-787-6 01-2119977109-27	20- 40 %	Eye Irrit. 2 H319 Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Sens. 1B H317 STOT RE 1 H372
Aliphatic Urethane Acrylate Oligomer		10- 20 %	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335 Skin Sens. 1 H317
2-Propenoic acid, dodecyl ester 2156-97-0	218-463-4 01-2119976296-23	10- 20 %	Skin Sens. 1 H317 STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Aquatic Chronic 2 H411
Mixture of less 3-(4-(2-Hydroxy-2- methylpropionyl)phenyl)-1,1,3- trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-m 163702-01-0	402-990-3 01-0000015270-82	1- < 5 %	Repr. 2 H361f
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	282-810-6 01-2119987994-10	1- < 5 %	Aquatic Chronic 2 H411 Skin Sens. 1B H317
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	915-687-0 01-2119491304-40	0,1- < 1 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Sens. 1A H317
Triacrylate ester 52408-84-1	500-114-5 500-114-5 01-2119487948-12	0,1- < 1 %	Eye Irrit. 2 H319 Skin Sens. 1B H317
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
Butyl hydroxytoluene 128-37-0	204-881-4 01-2119480433-40 01-2119555270-46 01-2119565113-46	0,1- < 0,25 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
Titanium dioxide 13463-67-7	236-675-5 01-2119489379-17	0,1- < 1 %	Carc. 2; Inhalation H351
Trimethylolpropane triacrylate 15625-89-5	239-701-3 01-2119489896-11	0,1- < 1 %	Eye Irrit. 2 H319 Skin Irrit. 2 H315 Skin Sens. 1

			H317 Aquatic Acute 1 H400
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For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

#### Skin contact:

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

#### Eye contact:

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

#### Ingestion:

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

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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

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:

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 (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) 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**

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**

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.

Keep container tightly sealed.

Refer to Technical Data Sheet

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

Acrylics

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**

Valid for  
Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
2,6-di-tert-Butyl-p-cresol 128-37-0			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
2,6-di-tert-Butyl-p-cresol 128-37-0		10	Exposure limit(s):	4 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Titanium dioxide 13463-67-7		1,25	Exposure limit(s):		TRGS 900
Titanium dioxide 13463-67-7			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Titanium dioxide 13463-67-7		10	Exposure limit(s):	2	TRGS 900

**Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	aqua (freshwater)		0,1 mg/l				
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	aqua (marine water)		0,01 mg/l				
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	aqua (intermittent releases)		1 mg/l				
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	sewage treatment plant (STP)		262 mg/l				
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	sediment (freshwater)				0,829 mg/kg		
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	sediment (marine water)				0,0829 mg/kg		
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	Soil				0,107 mg/kg		
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	aqua (freshwater)		0,00101 mg/l				
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	aqua (marine water)		0,000101 mg/l				
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	aqua (intermittent releases)		0,035 mg/l				
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	sediment (freshwater)				0,24 mg/kg		
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	sediment (marine water)				0,024 mg/kg		
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate 84434-11-7	Soil				0,047 mg/kg		
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	aqua (freshwater)		0,002200 mg/l				
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	aqua (marine water)		0,00022 mg/l				
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	aqua (intermittent releases)		0,009 mg/l				
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	sewage treatment plant (STP)		1 mg/l				
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	sediment (freshwater)				1,05 mg/kg		
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	sediment (marine water)				0,11 mg/kg		
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	Soil				0,21 mg/kg		
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	aqua (freshwater)		0,006 mg/l				
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	aqua (intermittent releases)		0,057 mg/l				
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Sewage treatment plant		10 mg/l				
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	sediment (freshwater)				0,017 mg/kg		
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	sediment (marine water)				0,002 mg/kg		

Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	aqua (marine water)		0,001 mg/l			
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	oral				5,6 mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Soil				0,012 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)		0,482 mg/l			
2-Hydroxyethyl methacrylate 868-77-9	aqua (marine water)		0,482 mg/l			
2-Hydroxyethyl methacrylate 868-77-9	sewage treatment plant (STP)		10 mg/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
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (freshwater)		0,000199 mg/l			
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (marine water)		0,00002 mg/l			
2,6-Di-tert-butyl-p-cresol 128-37-0	sewage treatment plant (STP)		0,17 mg/l			
2,6-Di-tert-butyl-p-cresol 128-37-0	sediment (freshwater)				0,0996 mg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	sediment (marine water)				0,00996 mg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	Soil				0,04769 mg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	oral				8,33 mg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (intermittent releases)		0,00199 mg/l			
2,6-Di-tert-butyl-p-cresol 128-37-0	Air					no hazard identified
Titanium dioxide 13463-67-7	aqua (freshwater)					no hazard identified
Titanium dioxide 13463-67-7	aqua (marine water)					no hazard identified
Titanium dioxide 13463-67-7	sewage treatment plant (STP)					no hazard identified
Titanium dioxide 13463-67-7	sediment (freshwater)					no hazard identified
Titanium dioxide 13463-67-7	sediment (marine water)					no hazard identified
Titanium dioxide 13463-67-7	Soil					no hazard identified
Titanium dioxide 13463-67-7	Aquatic (intermittent releases)					no hazard identified
Titanium dioxide 13463-67-7	Predator					no hazard identified
2-Ethyl-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	Soil				0,003 mg/kg	
2-Ethyl-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	sediment (freshwater)				0,017 mg/kg	
2-Ethyl-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	sediment (marine water)				0,002 mg/kg	
2-Ethyl-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate	aqua (freshwater)		0,00087 mg/l			



15625-89-5							
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	aqua (marine water)		0,000087 mg/l				
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	sewage treatment plant (STP)		6,25 mg/l				
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	oral				10 mg/kg		
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	aqua (intermittent releases)		0,0087 mg/l				

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	Workers	Inhalation	Long term exposure - systemic effects		4,9 mg/m <sup>3</sup>	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	Workers	dermal	Long term exposure - systemic effects		0,7 mg/kg	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	General population	Inhalation	Long term exposure - systemic effects		1,04 mg/m <sup>3</sup>	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	General population	dermal	Long term exposure - systemic effects		0,42 mg/kg	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	Workers	Inhalation	Long term exposure - local effects		0,17 mg/m <sup>3</sup>	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	General population	Inhalation	Long term exposure - local effects		0,04 mg/m <sup>3</sup>	
1-Vinylhexahydro-2H-azepin-2-one 2235-00-9	General population	oral	Long term exposure - systemic effects		0,4 mg/kg	
Dodecyl acrylate 2156-97-0	Workers	inhalation	Long term exposure - systemic effects		97,9 mg/m <sup>3</sup>	
Dodecyl acrylate 2156-97-0	Workers	dermal	Long term exposure - systemic effects		138,9 mg/kg	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	Workers	dermal	Long term exposure - systemic effects		1,7 mg/kg	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	Workers	inhalation	Long term exposure - systemic effects		5,88 mg/m <sup>3</sup>	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	General population	inhalation	Long term exposure - systemic effects		0,87 mg/m <sup>3</sup>	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	General population	dermal	Long term exposure - systemic effects		0,5 mg/kg	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	General population	oral	Long term exposure - systemic effects		0,5 mg/kg	
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	Workers	inhalation	Long term exposure - systemic effects		1,27 mg/m <sup>3</sup>	
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	Workers	dermal	Long term exposure - systemic effects		1,8 mg/kg	
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	General population	dermal	Long term exposure - systemic effects		0,9 mg/kg	
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	General population	inhalation	Long term exposure - systemic effects		0,31 mg/m <sup>3</sup>	
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	General population	oral	Long term exposure - systemic effects		0,18 mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Workers	inhalation	Long term exposure - systemic effects		16,22 mg/m <sup>3</sup>	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Workers	dermal	Long term exposure - systemic effects		1,92 mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	General population	oral	Long term exposure - systemic effects		1,39 mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	General population	inhalation	Long term exposure - systemic effects		4,87 mg/m <sup>3</sup>	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	General population	dermal	Long term exposure -		1,15 mg/kg	

52408-84-1			systemic effects			
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/m <sup>3</sup>	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/m <sup>3</sup>	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
2,6-Di-tert-butyl-p-cresol 128-37-0	Workers	inhalation	Long term exposure - systemic effects		3,5 mg/m <sup>3</sup>	no hazard identified
2,6-Di-tert-butyl-p-cresol 128-37-0	Workers	dermal	Long term exposure - systemic effects		0,5 mg/kg	no hazard identified
2,6-Di-tert-butyl-p-cresol 128-37-0	General population	inhalation	Long term exposure - systemic effects		0,86 mg/m <sup>3</sup>	no hazard identified
2,6-Di-tert-butyl-p-cresol 128-37-0	General population	dermal	Long term exposure - systemic effects		0,25 mg/kg	no hazard identified
2,6-Di-tert-butyl-p-cresol 128-37-0	General population	oral	Long term exposure - systemic effects		0,25 mg/kg	no hazard identified
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	Workers	dermal	Long term exposure - systemic effects		83 mg/kg	
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	Workers	inhalation	Long term exposure - systemic effects		3,5 mg/m <sup>3</sup>	
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	General population	dermal	Long term exposure - systemic effects		42 mg/kg	
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	General population	inhalation	Long term exposure - systemic effects		0,87 mg/m <sup>3</sup>	
2-Ethyl-2-[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate 15625-89-5	General population	oral	Long term exposure - systemic effects		0,5 mg/kg	

**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;  $\geq$  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:**

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 liquid white
Odor	Acrylic
Odour threshold	No data available / Not applicable
pH	Mixture is non-soluble (in water).
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	> 93,3 °C (> 199.94 °F)
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 ( $\rho$ )	1,1 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Oxidising properties	No data available / Not applicable

**9.2. Other information**

No data available / Not applicable

## 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 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
2H-Azepin-2-one, 1-ethenylhexahydro-2235-00-9	LD50	1.114 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-Propenoic acid, dodecyl ester 2156-97-0	LD50	> 5.570 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone 163702-01-0	LD50	> 2.000 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	LD50	3.230 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Triacrylate ester 52408-84-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rat	not specified
Butyl hydroxytoluene 128-37-0	LD50	> 6.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Titanium dioxide 13463-67-7	LD50	> 5.000 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
Trimethylolpropane triacrylate 15625-89-5	LD50	> 5.000 mg/kg	rat	not specified

**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
2H-Azepin-2-one, 1-ethenylhexahydro-2235-00-9	LD50	1.700 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2-Propenoic acid, dodecyl ester 2156-97-0	LD50	> 5.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone 163702-01-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	LD50	> 3.170 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	Acute toxicity estimate (ATE)	3.171 mg/kg		Expert judgement
Triacrylate ester 52408-84-1	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 5.000 mg/kg	rabbit	not specified
Butyl hydroxytoluene 128-37-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Titanium dioxide 13463-67-7	LD50	≥ 10.000 mg/kg	hamster	not specified
Trimethylolpropane triacrylate 15625-89-5	LD50	7.050 mg/kg	rabbit	not specified

**Acute inhalative toxicity:**

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

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Titanium dioxide 13463-67-7	LC50	> 6,82 mg/l	dust	4 h	rat	not specified

**Skin corrosion/irritation:**

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Triacrylate ester 52408-84-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Butyl hydroxytoluene 128-37-0	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Titanium dioxide 13463-67-7	not irritating	4 h	rabbit	equivalent or similar to 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 CAS-No.	Result	Exposure time	Species	Method
Triacrylate ester 52408-84-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2-Hydroxyethyl methacrylate 868-77-9	irritating		rabbit	Draize Test
Butyl hydroxytoluene 128-37-0	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Titanium dioxide 13463-67-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**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
2H-Azepin-2-one, 1- ethenylhexahydro- 2235-00-9	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphi nate 84434-11-7	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Triacrylate ester 52408-84-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2-Hydroxyethyl methacrylate 868-77-9	sensitising	Guinea pig maximisation test	guinea pig	not specified
Butyl hydroxytoluene 128-37-0	not sensitising	Draize Test	guinea pig	Draize Test
Titanium dioxide 13463-67-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

**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
Triacrylate ester 52408-84-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Triacrylate ester 52408-84-1	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Triacrylate ester 52408-84-1	positive	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 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)
Butyl hydroxytoluene 128-37-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
Butyl hydroxytoluene 128-37-0	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Butyl hydroxytoluene 128-37-0	negative	mammalian cell gene mutation assay	with		not specified
Titanium dioxide 13463-67-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Titanium dioxide 13463-67-7	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Titanium dioxide 13463-67-7	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation 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)
Butyl hydroxytoluene 128-37-0		oral: feed	2 y daily	rat	male	
Titanium dioxide 13463-67-7	not carcinogenic	inhalation	24 m 6 h/d; 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / 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
Triacrylate ester 52408-84-1	NOAEL P 750 mg/kg NOAEL F1 >= 750 mg/kg	screening	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)
Butyl hydroxytoluene 128-37-0	NOAEL P 500 mg/kg	Two generation study	oral: feed	rat	not specified
Titanium dioxide 13463-67-7	NOAEL P > 1.000 mg/kg NOAEL F1 > 1.000 mg/kg		oral: gavage	rat	OECD Guideline 421 (Reproduction / 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
2H-Azepin-2-one, 1-ethenylhexahydro- 2235-00-9		inhalation: vapour	90 d 5 hours/day; 5 days/week	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Triacrylate ester 52408-84-1	NOAEL 250 mg/kg	oral: gavage	28-52 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 100 mg/kg	oral: gavage	once daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Butyl hydroxytoluene 128-37-0	NOAEL 25 mg/kg	oral: feed	daily	rat	not specified
Titanium dioxide 13463-67-7	NOAEL 1.000 mg/kg	oral: gavage	90 d daily	rat	OECD Guideline 408 (Repeated Dose 90-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 CAS-No.	Value type	Value	Exposure time	Species	Method
2H-Azepin-2-one, 1-ethenylhexahydro-2235-00-9	LC50	318 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Propenoic acid, dodecyl ester 2156-97-0	LC50	Toxicity > Water solubility	96 h	Pimephales promelas	other guideline:
2-Propenoic acid, dodecyl ester 2156-97-0	NOEC	Toxicity > Water solubility	30 d	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 210 (fish early life stage toxicity test)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	LC50	Toxicity > Water solubility	95 h	Oncorhynchus mykiss	EU Method C.1 (Acute Toxicity for Fish)
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	LC50	1,89 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	LC50	0,9 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Triacrylate ester 52408-84-1	LC50	5,74 mg/l	96 h	Danio rerio (reported as Brachydanio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Hydroxyethyl methacrylate 868-77-9	LC50	> 100 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butyl hydroxytoluene 128-37-0	LC50	Toxicity > Water solubility	96 h	Brachydanio rerio (new name: Danio rerio)	EU Method C.1 (Acute Toxicity for Fish)
Butyl hydroxytoluene 128-37-0	NOEC	0,053 mg/l	30 d	Oryzias latipes	OECD Guideline 210 (fish early life stage toxicity test)
Titanium dioxide 13463-67-7	LC50	Toxicity > Water solubility	48 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trimethylolpropane triacrylate 15625-89-5	LC50	0,87 mg/l	96 h	Danio rerio (reported as Brachydanio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)

#### Toxicity (Daphnia):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
2-Propenoic acid, dodecyl ester 2156-97-0	EC50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	EC50	Toxicity > Water solubility	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	EC50	2,26 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Triacrylate ester 52408-84-1	EC50	91,4 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)

Butylhydroxytoluene 128-37-0	EC50	0,48 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Titanium dioxide 13463-67-7	EC50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Trimethylolpropanetriacrylate 15625-89-5	EC50	19,9 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)

#### Chronic toxicity to aquatic invertebrates

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
2-Propenoic acid, dodecyl ester 2156-97-0	NOEC	Toxicity > Water solubility	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Reaction mass of pentamethyl- 4-piperidylsebacates 1065336-91-5	NOEC	1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Butylhydroxytoluene 128-37-0	NOEC	0,069 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.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
2-Propenoic acid, dodecyl ester 2156-97-0	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	EC10	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	EC50	1,01 mg/l	72 h	Desmodesmus subspicatus	not specified
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	NOEC	0,22 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	EC50	1,68 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Triacrylate ester 52408-84-1	EC50	12,2 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Triacrylate ester 52408-84-1	EC10	2,06 mg/l	72 h	Desmodesmus subspicatus	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)
Butyl hydroxytoluene 128-37-0	EC50	Toxicity > Water solubility	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Butyl hydroxytoluene 128-37-0	EC10	0,4 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Titanium dioxide 13463-67-7	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethylolpropane triacrylate 15625-89-5	EC50	18,8 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)
Trimethylolpropane triacrylate 15625-89-5	EC10	1,9 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal Inhibition test)

#### Toxicity to microorganisms

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
2-Propenoic acid, dodecyl ester 2156-97-0	EC 50	> 10.000 mg/l	30 min		not specified
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	IC50	Toxicity > Water solubility	3 h	not specified	EU Method C.11 (Biodegradation: Activated Sludge Respiration Inhibition Test)
Triacrylate ester 52408-84-1	EC20	507 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	16 h	Pseudomonas fluorescens	other guideline:
Butyl hydroxytoluene	EC50	Toxicity > Water	3 h	activated sludge	OECD Guideline 209

128-37-0		solubility			(Activated Sludge, Respiration Inhibition Test)
Titanium dioxide 13463-67-7	EC0	Toxicity > Water solubility	24 h	Pseudomonas fluorescens	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)
Trimethylolpropane triacrylate 15625-89-5	EC20	625 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)

## 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Aliphatic Urethane Acrylate Oligomer	readily biodegradable		> 60 %	28 day	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Aliphatic Urethane Acrylate Oligomer	readily biodegradable	aerobic	> 60 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-Propenoic acid, dodecyl ester 2156-97-0	readily biodegradable	aerobic	80 - 90 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl-2-hydroxyprop-2-yl ketone 163702-01-0	not readily biodegradable.	not specified	1,8 %	28 day	Directive 84/449/EEC, C.7
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7		aerobic	< 10 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5		aerobic	38 %	28 d	OECD Guideline 301 E (Ready Biodegradability: Modified OECD Screening Test)
Triacrylate ester 52408-84-1	readily biodegradable	aerobic	72 - 85 %	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))
Butyl hydroxytoluene 128-37-0	not readily biodegradable.	aerobic	4,5 %	28 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Butyl hydroxytoluene 128-37-0	not inherently biodegradable	aerobic	5,2 - 5,6 %	35 d	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
Trimethylolpropane triacrylate 15625-89-5	readily biodegradable	aerobic	> 82 - 90 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Trimethylolpropane triacrylate 15625-89-5	inherently biodegradable	aerobic	> 70 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)

## 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
Butyl hydroxytoluene 128-37-0	330 - 1.800	56 d		Cyprinus carpio	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)

## 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
2-Propenoic acid, dodecyl ester 2156-97-0	6,13		QSAR (Quantitative Structure Activity Relationship)
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone 163702-01-0	4,53		EU Method A.8 (Partition Coefficient)
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	2,91	25 °C	EU Method A.8 (Partition Coefficient)
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	2,37 - 2,77	25 °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)
Butyl hydroxytoluene 128-37-0	5,1		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Trimethylolpropane triacrylate 15625-89-5	2,68		QSAR (Quantitative Structure Activity Relationship)

### 12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT/ vPvB
2H-Azepin-2-one, 1-ethenylhexahydro- 2235-00-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Aliphatic Urethane Acrylate Oligomer	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2-Propenoic acid, dodecyl ester 2156-97-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Mixture of less 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone and 3-(4-(2-Hydroxy-2-methylpropionyl)phenyl)-1,1,3-trimethylindan-6-yl 2-hydroxyprop-2-yl ketone 163702-01-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate 84434-11-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Triacrylate ester 52408-84-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2-Hydroxyethyl methacrylate 868-77-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Butyl hydroxytoluene 128-37-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Titanium dioxide 13463-67-7	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not be conducted for inorganic substances.
Trimethylolpropane triacrylate 15625-89-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

### 12.6. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Product disposal:**

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

Dispose of in accordance with local and national regulations.

**Disposal of uncleaned packages:**

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

**Waste code**

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

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

**SECTION 14: Transport information****14.1. UN number**

ADR	3082
RID	3082
ADN	3082
IMDG	3082
IATA	3082

**14.2. UN proper shipping name**

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dodecyl acrylate, Reaction mass of pentamethyl-4-piperidylsebacates)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dodecyl acrylate, Reaction mass of pentamethyl-4-piperidylsebacates)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dodecyl acrylate, Reaction mass of pentamethyl-4-piperidylsebacates)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dodecyl acrylate, Reaction mass of pentamethyl-4-piperidylsebacates)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Dodecyl acrylate, Reaction mass of pentamethyl-4-piperidylsebacates)

**14.3. Transport 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. Environmental hazards**

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	Marine pollutant
IATA	not applicable

**14.6. Special precautions for user**

ADR	not applicable
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	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), A197 (IATA), 2.10.2.7 (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**

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable

**EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC):** Not applicable

VOC content (2010/75/EC)	< 3 %
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**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK:	WGK 3: highly hazardous to water (Ordinance on facilities for handling substances that are hazardous to water (AwSV) ) Classification according to AwSV, Annex 1 (5.2)
Storage class according to TRGS 510:	10
General remarks (DE):	This product is in scope of the German regulation "Chemikalienverbotsverordnung"



**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:

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H361f Suspected of damaging fertility.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

**Further information:**

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.

Dear Customer,

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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.**