

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

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SDS No.: 694372 V004.2

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

#### 1.1. Product identifier

LOCTITE 3D PRO410 Black

LOCTITE 3D PRO410 Black

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

Intended use: 3D Printing

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

Henkel Ltd Adhesives Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

SDSinfo.Adhesive@henkel.com

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

#### 1.4. Emergency telephone number

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

#### **SECTION 2: Hazards identification**

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

#### Classification (CLP):

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Serious eye damage Category 1

H318 Causes serious eye damage.

Chronic hazards to the aquatic environment Category 2

H411 Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



 $\textbf{Contains} \qquad \qquad \text{Poly[oxy(methyl-1,2-ethanediyl)], } \\ \alpha,\alpha'-(2,2-\text{dimethyl-1,3-propanediyl)bis[}\\ \omega-[(1-\text{oxo-2-thanediyl})] \\ \alpha,\alpha'-(2,2-\text{dimethyl-1,3-propanediyl})\\ \alpha,\alpha'-(2,2-\text{dimethyl-1,3-propanedi$ 

propen-1-yl)oxy]-

Dicyclopentyldimethylene diacrylate Tris(2-acryloxyethyl) isocyanurate

Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Triacrylate ester

Reaction mass of pentamethyl-4-piperidylsebacates

2-Hydroxyethyl acrylate

Triphenyl phosphite

Signal word: Danger

**Hazard statement:** H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statement:** "\*\*\*" \*\*\*For consumer use only: P101 If medical advice is needed, have product

container or label at hand. P102 Keep out of reach of children. P501 Dispose of

contents/container in accordance with national regulation.\*\*\*

**Precautionary statement:** P273 Avoid release to the environment.

**Prevention** P280 Wear protective gloves/eye protection.

**Precautionary statement:** P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

**Response** contact lenses, if present and easy to do. Continue rinsing. 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.

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

This mixture does not contain any substances in a concentration  $\geq$  the concentration limit for depiction in Section 3 that are assessed to be a PBT, vPvB or ED.

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

#### 3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
Poly[oxy(methyl-1,2- ethanediyl)], α,α'-(2,2-dimethyl- 1,3-propanediyl)bis[ω-[(1-oxo-2- propen-1-yl)oxy]- 84170-74-1	25- 50 %	Skin Sens. 1, H317 Aquatic Chronic 2, H411		
Dicyclopentyldimethylene diacrylate 42594-17-2 255-901-3 01-2120051112-76	20- 40 %	Skin Sens. 1B, H317 Aquatic Chronic 2, H411		
Tris(2-acryloxyethyl) isocyanurate 40220-08-4 254-843-6 01-2120741502-64	10- 20 %	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411		
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7 423-340-5 01-2119489401-38 01-2119936813-33	1-< 5 %	Skin Sens. 1A, H317 Aquatic Chronic 4, H413		
Hexan-6-olide 502-44-3 207-938-1	1-< 5 %	Eye Irrit. 2, H319	oral:ATE = 2.500 mg/kg	
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		
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 Repr. 2, H361f	M acute = 1 M chronic = 1 ===== dermal:ATE = 3.171 mg/kg	
Butyl hydroxytoluene 128-37-0 204-881-4 01-2119565113-46	0,1-< 1 %	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M acute = 1 M chronic = 1	
2-Hydroxyethyl acrylate 818-61-1 212-454-9 01-2119459345-34	0,1-< 0,2 %	Acute Tox. 4, Oral, H302 Acute Tox. 3, Dermal, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	Skin Sens. 1; H317; C >= 0,2 % =====  M acute = 1	
Triphenyl phosphite 101-02-0 202-908-4 01-2119511213-58	0,01-< 0,1 %	Acute Tox. 4, Oral, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT RE 2, H373 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Skin Irrit. 2; H315; C >= 5 % Eye Irrit. 2; H319; C >= 5 % ====== dermal:ATE = 2.500 mg/kg	

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.

Eve contact

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

Ingestion:

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

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

SKIN: Rash, Urticaria.

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:

water, carbon dioxide, foam, powder

### Extinguishing media which must not be used for safety reasons:

High pressure waterjet

#### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

#### **5.3.** Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

#### **Additional information:**

In case of fire, keep containers cool with water spray.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Keep away from sources of ignition.

#### 6.2. Environmental precautions

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

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

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 Keep container tightly sealed.

### 7.3. Specific end use(s)

3D Printing

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

### 8.1. Control parameters

#### **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
2,6-di-tert-Butyl-p-cresol		10	Time Weighted Average		EH40 WEL
128-37-0			(TWA):		
[2,6-DI-TERT-BUTYL-P-CRESOL]					

### **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m³		Short term exposure limit category / Remarks	Regulatory list
2,6-di-tert-Butyl-p-cresol 128-37-0		2	Time Weighted Average (TWA):		IR_OEL
[2,6-DITERTIARY-BUTYL-PARA-CRESOL]					

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
(Octahydro-4,7-methano-1H- indenediyl)bis(methylene) diacrylate 42594-17-2	aqua (freshwater)		0,0016 mg/l				
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	aqua (marine water)		0,00016 mg/l				
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	sediment (freshwater)				0,6576 mg/kg		
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	sediment (marine water)				0,0658 mg/kg		
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Soil				0,1306 mg/kg		
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	sewage treatment plant (STP)		10 mg/l				
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	aqua (intermittent releases)		0,016 mg/l				
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	aqua (freshwater)		0,00943 mg/l				
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	aqua (intermittent releases)		0,0943 mg/l				
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	sewage treatment plant (STP)		10 mg/l				
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	aqua (marine water)		0,000943 mg/l				
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	sediment (freshwater)				0,62 mg/kg		
(2,4,6-Trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	sediment (marine water)				0,062 mg/kg		
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	Soil				0,118 mg/kg		
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	aqua (freshwater)		0,001 mg/l				
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	aqua (intermittent releases)		0,001 mg/l				
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	aqua (marine water)		0,001 mg/l				
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	sewage treatment plant (STP)		1 mg/l				
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	sediment (freshwater)				0,712 mg/kg		
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	sediment (marine water)				0,712 mg/kg		
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	Soil				20 mg/kg		

Chromal meanwritetad actama with complia	Lagua I	0,006 mg/l	1 1	1
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	aqua (freshwater)	0,006 mg/1		
52408-84-1	( '' '' '' '			
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	aqua (intermittent	0,057 mg/l		
52408-84-1	releases)			
Glycerol, propoxylated, esters with acrylic	Sewage	10 mg/l		
acid 1-6.5PO	treatment plant			
52408-84-1 Glycerol, propoxylated, esters with acrylic	sediment		0.078	+
acid 1-6.5PO	(freshwater)		mg/kg	
52408-84-1				
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	sediment (marine water)		0,008	
52408-84-1	(marme water)		mg/kg	
Glycerol, propoxylated, esters with acrylic	aqua (marine	0,001 mg/l		
acid 1-6.5PO 52408-84-1	water)			
Glycerol, propoxylated, esters with acrylic	Soil		0.012	
acid 1-6.5PO			mg/kg	
52408-84-1		2002		
Reaction mass of pentamethyl-4- piperidylsebacates	aqua (freshwater)	0,002 mg/l		
1065336-91-5	(Heshwater)			
Reaction mass of pentamethyl-4-	aqua (marine	0,00022		
piperidylsebacates 1065336-91-5	water)	mg/l		
Reaction mass of pentamethyl-4-	aqua	0,009 mg/l		
piperidylsebacates	(intermittent	, ,		
1065336-91-5	releases)	1 /1		
Reaction mass of pentamethyl-4- piperidylsebacates	sewage treatment plant	1 mg/l		
1065336-91-5	(STP)			
Reaction mass of pentamethyl-4-	sediment		1,05 mg/kg	
piperidylsebacates 1065336-91-5	(freshwater)			
Reaction mass of pentamethyl-4-	sediment		0,11 mg/kg	
piperidylsebacates	(marine water)			
1065336-91-5 Reaction mass of pentamethyl-4-	Soil		0,21 mg/kg	
piperidylsebacates	3011		0,21 mg/kg	
1065336-91-5				
Reaction mass of pentamethyl-4- piperidylsebacates	Predator			no potential for bioaccumulation
1065336-91-5				bioaccumulation
2,6-Di-tert-butyl-p-cresol	aqua	0,000199		
128-37-0	(freshwater)	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	sewage	0,17 mg/l		
128-37-0	treatment plant			
2,6-Di-tert-butyl-p-cresol	(STP) sediment		0.0996	+
128-37-0	(freshwater)		mg/kg	
2,6-Di-tert-butyl-p-cresol	sediment		0,00996	
128-37-0 2,6-Di-tert-butyl-p-cresol	(marine water)		mg/kg 0,04769	
128-37-0	Soil		mg/kg	
2,6-Di-tert-butyl-p-cresol	oral		8,33 mg/kg	
128-37-0		0.00100		
2,6-Di-tert-butyl-p-cresol 128-37-0	aqua (intermittent	0,00199 mg/l		
	releases)	b/ 1		
2,6-Di-tert-butyl-p-cresol	Air			no hazard identified
128-37-0 2-Hydroxyethyl acrylate	aqua	0,017 mg/l		
818-61-1	(freshwater)			
2-Hydroxyethyl acrylate	aqua (marine	0,002 mg/l		
818-61-1 2-Hydroxyethyl acrylate	water) aqua	0,036 mg/l		
818-61-1	(intermittent	0,030 mg/1		
	releases)		0.071	
2-Hydroxyethyl acrylate 818-61-1	sediment (freshwater)		0,064 mg/kg	
2-Hydroxyethyl acrylate	sediment		0,006	
818-61-1	(marine water)		mg/kg	

2-Hydroxyethyl acrylate 818-61-1	Soil		0,003 mg/kg	
2-Hydroxyethyl acrylate 818-61-1	Sewage treatment plant	10 mg/l		
2-Hydroxyethyl acrylate 818-61-1	Air			no hazard identified
Triphenyl phosphite 101-02-0	aqua (freshwater)	0,0077 mg/l		
Triphenyl phosphite 101-02-0	Sewage treatment plant	2,1 mg/l		
Triphenyl phosphite 101-02-0	Soil		0,136 mg/kg	

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	Workers	inhalation	Long term exposure - systemic effects		1,65 mg/m3	
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	Workers	dermal	Long term exposure - systemic effects		2,3 mg/kg	
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	General population	inhalation	Long term exposure - systemic effects		0,29 mg/m3	
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	General population	oral	Long term exposure - systemic effects		0,08 mg/kg	
(2,4,6-Trioxo-1,3,5-triazine- 1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl triacrylate 40220-08-4	General population	dermal	Long term exposure - systemic effects		0,83 mg/kg	
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	Workers	Inhalation	Long term exposure - systemic effects		21 mg/m3	
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	Workers	dermal	Long term exposure - systemic effects		3 mg/kg	
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	General population	inhalation	Long term exposure - systemic effects		5,2 mg/m3	
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	General population	dermal	Long term exposure - systemic effects		1,5 mg/kg	
Phenyl bis(2,4,6-trimethylbenzoyl)- phosphine oxide 162881-26-7	General population	oral	Long term exposure - systemic effects		1,5 mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Workers	inhalation	Long term exposure - systemic effects		7,4 mg/m3	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO 52408-84-1	Workers	dermal	Long term exposure - systemic effects		2,1 mg/kg	
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	Workers	inhalation	Long term exposure - systemic effects		1,27 mg/m3	no potential for bioaccumulation
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	Workers	dermal	Long term exposure - systemic effects		1,8 mg/kg	no potential for bioaccumulation
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	General population	dermal	Long term exposure - systemic effects		0,9 mg/kg	no potential for bioaccumulation
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	General population	inhalation	Long term exposure - systemic effects		0,31 mg/m3	no potential for bioaccumulation
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	General population	oral	Long term exposure - systemic effects		0,18 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/m3	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/m3	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-Hydroxyethyl acrylate 818-61-1	Workers	inhalation	Long term exposure - local effects	2,4 mg/m3	no hazard identified
2-Hydroxyethyl acrylate 818-61-1	General population	inhalation	nhalation Long term exposure - local effects		no hazard identified
Triphenyl phosphite 101-02-0	General population	dermal	Long term exposure - systemic effects	0,150 mg/kg	
Triphenyl phosphite 101-02-0	General population	inhalation	Long term exposure - systemic effects	0,53 mg/m3	

#### **Biological Exposure Indices:**

None

#### 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

#### Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

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

#### Eye protection:

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

Skin protection:

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

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

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

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

Physical state liquid
Delivery form liquid
Colour black
Odor Acrylic

Melting point Not applicable, Product is a liquid

Solidification temperature < 0 °C (< 32 °F)

Initial boiling point > 149 °C (> 300.2 °F)

Flammability The product is not flammable.

Explosive limits Not applicable, The product is not flammable.

Flash point > 93,3 °C (> 199.94 °F)

Auto-ignition temperature

Not applicable, The product is not flammable.

Decomposition temperature

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

organic peroxide and does not decompose under foreseen

conditions of use

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

> 20,5 mm2/s

Viscosity, dynamic 500 mPa.s no method

()

рΗ

Solubility (qualitative) practically insoluble

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

Not applicable

Not applicable Mixture < 1,3 kPa

Vapour pressure (20 °C (68 °F))

Viscosity (kinematic)

(40 °C (104 °F); )

Density (20 °C (68 °F))

Relative vapour density:

(20 °C)

Particle characteristics

1,1 g/cm3 no method

> 1

Not applicable Product is a liquid

#### 9.2. Other information

Other information not applicable for this product

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

#### 10.1. Reactivity

Reacts with strong oxidants.

Strong bases.

Acids.

Reducing agents.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

Stable under normal conditions of storage and use.

#### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

carbon oxides.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

### **SECTION 11: Toxicological information**

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

### Acute oral toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Dicyclopentyldimethylene diacrylate 42594-17-2	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	LD0	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Phenyl bis(2,4,6- trimethylbenzoyl)- phosphine oxide 162881-26-7	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Hexan-6-olide 502-44-3	LD50	> 2.000 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))
Hexan-6-olide 502-44-3	Acute toxicity estimate (ATE)	2.500 mg/kg		Expert judgement
Triacrylate ester 52408-84-1	LD50	> 2.000 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)
Butyl hydroxytoluene 128-37-0	LD50	> 6.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-Hydroxyethyl acrylate 818-61-1	LD50	540 mg/kg	rat	not specified
Triphenyl phosphite 101-02-0	LD50	1.590 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

### Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Dicyclopentyldimethylene	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
diacrylate				
42594-17-2				
Phenyl bis(2,4,6-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
trimethylbenzoyl)-				
phosphine oxide				
162881-26-7				
Hexan-6-olide	LD50	6.400 mg/kg	rabbit	not specified
502-44-3				
Triacrylate ester	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
52408-84-1			1	,,,
Reaction mass of	LD50	> 3.170 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
pentamethyl-4-	LD30	> 3.170 mg/kg	Tut	OLOD Guideline 402 (Neute Bermai Toxicity)
piperidylsebacates				
1065336-91-5				
Reaction mass of	Acute	3.171 mg/kg		Expert judgement
pentamethyl-4-	toxicity	J.171 Hig/Kg		Expert judgement
	estimate			
piperidylsebacates				
1065336-91-5	(ATE)	2 000 #		OF GD G 11 II 100 (1 D 1 1 )
Butyl hydroxytoluene	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
128-37-0				
Triphenyl phosphite	LD50	> 2.000 - <	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
101-02-0		5.000 mg/kg		
Triphenyl phosphite	Acute	2.500 mg/kg		Expert judgement
101-02-0	toxicity			
	estimate			
	(ATE)			

#### Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Triphenyl phosphite 101-02-0	LC50	> 6,7 mg/l	dust/mist	1 h	rat	equivalent or similar to 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		
Dicyclopentyldimethylene	not irritating		In vitro	OECD Guideline 439 (In Vitro Skin Irritation:
diacrylate				Reconstructed Human Epidermis (RHE) Test Method)
42594-17-2				
Triacrylate ester	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
52408-84-1	_			
Butyl hydroxytoluene	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
128-37-0				

#### 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
Dicyclopentyldimethylene diacrylate 42594-17-2	not irritating		In vitro	OECD Guideline 437 (BCOP)
Triacrylate ester 52408-84-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Butyl hydroxytoluene 128-37-0	slightly 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
Dicyclopentyldimethylene diacrylate 42594-17-2	Sub-Category 1B (sensitising)	Freund's complete adjuvant test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triacrylate ester 52408-84-1	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)
Butyl hydroxytoluene 128-37-0	not sensitising	Draize Test	guinea pig	Draize Test
2-Hydroxyethyl acrylate 818-61-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	not specified
Triphenyl phosphite 101-02-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triphenyl phosphite 101-02-0	sensitising	Guinea pig maximisation test	guinea pig	EPA OPPTS 870.2600 (Skin Sensitisation)

### Germ cell mutagenicity:

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

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Dicyclopentyldimethylene diacrylate 42594-17-2	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	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)
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
2-Hydroxyethyl acrylate 818-61-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified

### 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
Butyl hydroxytoluene 128-37-0		oral: feed	2 y daily	rat	male	

### 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)
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	NOAEL P < 221 mg/kg NOAEL F1 221 mg/kg		oral: feed	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Butyl hydroxytoluene 128-37-0	NOAEL P 500 mg/kg	Two generation study	oral: feed	rat	not specified

### 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
Dicyclopentyldimethylene diacrylate 42594-17-2	NOAEL 1.000 mg/kg	oral: gavage		rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
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)
Butyl hydroxytoluene 128-37-0	NOAEL 25 mg/kg	oral: feed	daily	rat	not specified
Triphenyl phosphite 101-02-0	NOAEL 15 mg/kg	oral: gavage	16 weeks daily	rat	equivalent or similar to OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reprod./Develop. Tox. Screening Test)

### Aspiration hazard:

No data available.

#### 11.2 Information on other hazards

not applicable

### **SECTION 12: Ecological information**

### General ecological information:

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

### 12.1. Toxicity

### **Toxicity (Fish):**

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha,\alpha'$ -(2,2-dimethyl-1,3-propanediyl)bis[ $\omega$ -[(1-oxo-2-	LC50	2,7 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
propen-1-yl)oxy]- 84170-74-1					
Dicyclopentyldimethylene diacrylate 42594-17-2	LC50	1,65 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	LC50	9,43 mg/l	96 h	Danio rerio (reported as Brachydanio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	LC50	Toxicity > Water solubility'	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hexan-6-olide 502-44-3	LC50	280 mg/l	96 h	Poecilia reticulata	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)
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)
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 lite stage toxicity test)
2-Hydroxyethyl acrylate 818-61-1	LC50	4,8 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Triphenyl phosphite 101-02-0	LC50	> 16 mg/l	96 h	Brachydanio rerio (new name: Danio 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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Poly[oxy(methyl-1,2-	EC50	37 mg/l	48 h	Daphnia magna	OECD Guideline 202
ethanediyl)], $\alpha,\alpha'$ -(2,2-					(Daphnia sp. Acute
dimethyl-1,3-					Immobilisation Test)
propanediyl)bis[ω-[(1-oxo-2-					
propen-1-yl)oxy]-					
84170-74-1	5050	2.25 #	10.1	n	0707 G 11 II 404
Dicyclopentyldimethylene	EC50	2,36 mg/l	48 h	Daphnia magna	OECD Guideline 202
diacrylate					(Daphnia sp. Acute
42594-17-2					Immobilisation Test)
Tris(2-acryloxyethyl)	EC50	158,3 mg/l	48 h	Daphnia magna	OECD Guideline 202
isocyanurate					(Daphnia sp. Acute
40220-08-4					Immobilisation Test)
Phenyl bis(2,4,6-	EC50	Toxicity > Water	48 h	Daphnia magna	OECD Guideline 202
trimethylbenzoyl)-phosphine		solubility			(Daphnia sp. Acute
oxide					Immobilisation Test)
162881-26-7					
Triacrylate ester	EC50	91,4 mg/l	48 h	Daphnia magna	OECD Guideline 202
52408-84-1					(Daphnia sp. Acute
					Immobilisation Test)
Butyl hydroxytoluene	EC50	0,48 mg/l	48 h	Daphnia magna	OECD Guideline 202
128-37-0					(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)
Triphenyl phosphite	EC50	> 1 - 5 mg/l	48 h	Daphnia sp.	OECD Guideline 202
101-02-0					(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.

~.~*	Value type	Value	Exposure time	Species	Method
	NOEC	Toxicity > Water solubility	21 day		OECD 211 (Daphnia magna, Reproduction Test)
Reaction mass of pentamethyl- 4-piperidylsebacates 1065336-91-5	NOEC	1 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
Butyl hydroxytoluene 128-37-0	NOEC	0,069 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
2-Hydroxyethyl acrylate 818-61-1	NOEC	0,86 mg/l	21 d	1 0	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
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha,\alpha'$ -(2,2-dimethyl-1,3-propanediyl)bis[ $\omega$ -[(1-oxo-2-propen-1-yl)oxy]-84170-74-1	EC50	11 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha,\alpha'$ -(2,2-dimethyl-1,3-propanediyl)bis[ $\omega$ -[(1-oxo-2-propen-1-yl)oxy]-84170-74-1	EC10	2,3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dicyclopentyldimethylene diacrylate 42594-17-2	EC50	1,6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dicyclopentyldimethylene diacrylate 42594-17-2	EC10	0,64 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	EC50	25,7 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	EC10	12,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	EC50	Toxicity > Water solubility	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	NOEC	Toxicity > Water solubility	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)
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)
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)
2-Hydroxyethyl acrylate 818-61-1	EC50	6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl acrylate 818-61-1	NOEC	1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

### Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	EC 50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Hexan-6-olide 502-44-3	EC0	32 mg/l	16 h		not specified
Triacrylate ester 52408-84-1	EC20	507 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Reaction mass of pentamethyl- 4-piperidylsebacates 1065336-91-5	IC50	100 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Butyl hydroxytoluene 128-37-0	EC50	Toxicity > Water solubility	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2-Hydroxyethyl acrylate 818-61-1	EC10	> 100 mg/l	72 h	activated sludge, domestic	other guideline:
Triphenyl phosphite 101-02-0	EC 50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

### 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha,\alpha'$ -(2,2-dimethyl-1,3-propanediyl)bis[ $\omega$ -[(1-oxo-2-propen-1-yl)oxy]-84170-74-1	not readily biodegradable.	aerobic	41 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Dicyclopentyldimethylene diacrylate 42594-17-2	not readily biodegradable.	aerobic	28 %	28 day	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	not readily biodegradable.	aerobic	14,5 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	not readily biodegradable.	aerobic	1 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Hexan-6-olide 502-44-3	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Triacrylate ester 52408-84-1	readily biodegradable	aerobic	72 - 85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Reaction mass of pentamethyl- 4-piperidylsebacates 1065336-91-5	not readily biodegradable.	aerobic	38 %	28 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
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))
2-Hydroxyethyl acrylate 818-61-1	readily biodegradable	aerobic	> 79 - 80 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Triphenyl phosphite 101-02-0	readily biodegradable	aerobic	84 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

### 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	< 5				OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	< 31,4	56 d	24,5 °C	Cyprinus carpio	other guideline:
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
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha,\alpha'$ -(2,2-dimethyl-1,3-propanediyl)bis[ $\omega$ -[(1-oxo-2-propen-1-yl)oxy]-84170-74-1	> 1 - 4,86		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Dicyclopentyldimethylene diacrylate 42594-17-2	4,6		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	1,85	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide 162881-26-7	5,8		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Hexan-6-olide 502-44-3	0,68		not specified
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)
Butyl hydroxytoluene 128-37-0	5,1		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
2-Hydroxyethyl acrylate 818-61-1	-0,17	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Triphenyl phosphite 101-02-0	6,62	25 °C	QSAR (Quantitative Structure Activity Relationship)

### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.  Dicyclopentyldimethylene diacrylate 42594-17-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide 162881-26-7	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.
Reaction mass of pentamethyl-4- piperidylsebacates 1065336-91-5	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.
2-Hydroxyethyl acrylate 818-61-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Triphenyl phosphite 101-02-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

### 12.6. Endocrine disrupting properties

not applicable

### 12.7. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### Product disposal:

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

Dispose of in accordance with local and national regulations.

### Disposal of uncleaned packages:

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

### Waste code

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

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

### **SECTION 14: Transport information**

#### 14.1. UN number or ID number

ADR	3082
RID	3082
ADN	3082
IMDG	3082
IATA	3082

#### 14.2. UN proper shipping name

ADR ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Neopentylglycol PO diacrylate, (Octahydro-4,7-methano-1H-

indenediyl)bis(methylene) diacrylate)

RID ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Neopentylglycol PO diacrylate,(Octahydro-4,7-methano-1H-

indenediyl)bis(methylene) diacrylate)

ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Neopentylglycol PO diacrylate, (Octahydro-4,7-methano-1H-

indenediyl)bis(methylene) diacrylate)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Neopentylglycol PO diacrylate, (Octahydro-4,7-methano-1H-

indenediyl)bis(methylene) diacrylate)

IATA Environmentally hazardous substance, liquid, n.o.s. (Neopentylglycol PO

diacrylate,(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate)

#### 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	Ш

#### 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

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.

Not applicable

Not applicable

Not applicable

#### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

### **SECTION 15: Regulatory information**

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

VOC content < 3 %

(2010/75/EC)

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

### **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

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.

H361f Suspected of damaging fertility.

H373 May cause 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.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

ED: Substance identified as having endocrine disrupting properties

EU OEL:

EU EXPLD 1:

Substance with a Union workplace exposure limit

EU EXPLD 1:

Substance listed in Annex I, Reg (EC) No. 2019/1148

EU EXPLD 2

Substance listed in Annex II, Reg (EC) No. 2019/1148

SVHC:

Substance of very high concern (REACH Candidate List)

PBT:

Substance fulfilling persistent, bioaccumulative and toxic criteria

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

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

#### **Further information:**

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

#### Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.