

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

Page 1 of 24

LOCTITE 3D IND147

SDS No. : 719750 V002.1 Revision: 21.04.2023 printing date: 22.05.2023 Replaces version from: 29.11.2022

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

1.1. Product identifier LOCTITE 3D IND147

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use:
3D Printing Resin

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

SDSinfo.Adhesive@henkel.com

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

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Contains	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate
	Tris(2-acryloxyethyl) isocyanurate 2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H-indene-5-diyl)bis(methylene) ester
	Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide Triacrylate ester Isobornyl acrylate
Signal word:	Danger
Hazard statement:	 H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement: Prevention	P261 Avoid breathing vapors.P280 Wear protective gloves/eye protection.P273 Avoid release to the environment.
Precautionary statement: Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

None if used properly.

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

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
7,7,9(or 7,9,9)-trimethyl-4,13- dioxo-3,14-dioxa-5,12- diazahexadecane-1,16-diyl bismethacrylate 72869-86-4 276-957-5 01-2120751202-68	20- 40 %	Skin Sens. 1B, H317 Aquatic Chronic 2, H411		
Tris(2-acryloxyethyl) isocyanurate 40220-08-4 254-843-6 01-2120741502-64	20- 40 %	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411		
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H- indene-5-diyl)bis(methylene) ester 43048-08-4 256-062-6 01-2120164868-39	20- 40 %	STOT SE 3, H335 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 1, H410 Aquatic Acute 1, H400	STOT SE 3; H335; C >= 10 % ===== M acute = 1 M chronic = 1	
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 75980-60-8 278-355-8 01-2119972295-29	0,1-< 1 %	Repr. 2, H361f Aquatic Chronic 2, H411 Skin Sens. 1B, 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		
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	
Isobornyl acrylate 5888-33-5 227-561-6 01-2119957862-25	0,01-< 0,1 %	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M acute = 1 M chronic = 1	

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: Rash, Urticaria.

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

SKIN: Redness, inflammation.

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 incompatibilitiesEnsure good ventilation/extraction.Keep container tightly sealed.Refer to Technical Data Sheet

7.3. Specific end use(s) 3D Printing Resin

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ррт	mg/m ³	~ 1	Short term exposure limit category / Remarks	Regulatory list
2,6-di-tert-Butyl-p-cresol 128-37-0 [2,6-DI-TERT-BUTYL-P-CRESOL]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ррт	mg/m ³		Short term exposure limit category / Remarks	Regulatory list
2,6-di-tert-Butyl-p-cresol 128-37-0 [2,6-DITERTIARY-BUTYL-PARA- CRESOL]		2	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental		Value				Remarks
	Compartment	period	mg/l	ppm	mg/kg	others	
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-	aqua		0,01 mg/l	ррш	nig/kg	others	
dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	(freshwater)						
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	aqua (intermittent releases)		0,1 mg/l				
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	aqua (marine water)		0,001 mg/l				
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	sewage treatment plant (STP)		3,61 mg/l				
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	sediment (freshwater)				4,56 mg/kg		
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	sediment (marine water)				0,46 mg/kg		
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	Soil				0,91 mg/kg		
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14- dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	Predator						no potential for bioaccumulation
(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		
(Octahydro-4,7-methano-1H- indenediyl)bis(methylene) bismethacrylate 43048-08-4 (Octahydro-4,7-methano-1H-	aqua (freshwater)		0,000144 mg/l 0,00144				
(Octahydro-4, /-methano-1H- indenediyl)bis(methylene) bismethacrylate 43048-08-4 (Octahydro-4,7-methano-1H-	aqua (intermittent releases) aqua (marine		0,00144 mg/l 0,000014				
indenediyl)bis(methylene) bismethacrylate 43048-08-4	water)		mg/l				
(Octahydro-4,7-methano-1H-	Sewage		10 mg/l				

indenediyl)bis(methylene) bismethacrylate 43048-08-4	treatment plant			
(Octahydro-4,7-methano-1H-	sediment		0,125	
indenediyl)bis(methylene) bismethacrylate 43048-08-4	(freshwater)		mg/kg	
(Octahydro-4,7-methano-1H-	sediment		0,013	
indenediyl)bis(methylene) bismethacrylate 43048-08-4	(marine water)		mg/kg	
(Octahydro-4,7-methano-1H- indenediyl)bis(methylene) bismethacrylate 43048-08-4	Soil		0,022 mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua	0,0014		
oxide 75980-60-8	(freshwater)	mg/l		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	aqua (marine	0,00014		
oxide 75980-60-8	water)	mg/l		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Freshwater -	0,014 mg/l		
oxide 75980-60-8	intermittent	0,011 mg1		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Marine water -	0,0014		
oxide 75980-60-8	intermittent	mg/l		
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment		0,115	
oxide 75980-60-8	(freshwater)		mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	sediment		0,0115	
oxide 75980-60-8	(marine water)		mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine	Soil		0,0222	
oxide 75980-60-8			mg/kg	
Glycerol, propoxylated, esters with acrylic	aqua	0,006 mg/l		
acid 1-6.5PO 52408-84-1	(freshwater)			
Glycerol, propoxylated, esters with acrylic	aqua	0,057 mg/l		
acid 1-6.5PO 52408-84-1	(intermittent releases)			
Glycerol, propoxylated, esters with acrylic	Sewage	10 mg/l		
acid 1-6.5PO 52408-84-1	treatment plant			
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	sediment		0,078	
52408-84-1	(freshwater)		mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	sediment		0,008	
52408-84-1	(marine water)		mg/kg	
Glycerol, propoxylated, esters with acrylic acid 1-6.5PO	aqua (marine water)	0,001 mg/l		
52408-84-1	water)			
Glycerol, propoxylated, esters with acrylic	Soil		0,012	
acid 1-6.5PO 52408-84-1			mg/kg	
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 (STP)			
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) Soil		mg/kg 0.04769	
128-37-0			mg/kg	
2,6-Di-tert-butyl-p-cresol 128-37-0	oral		8,33 mg/kg	
2,6-Di-tert-butyl-p-cresol	aqua	0,00199		
128-37-0	(intermittent releases)	mg/l		
2,6-Di-tert-butyl-p-cresol 128-37-0	Air			no hazard identified
Isobornyl acrylate	aqua	0,001 mg/l		
5888-33-5	(freshwater)	0.007 7		
Isobornyl acrylate	aqua	0,007 mg/l		

5888-33-5	(intermittent releases)			
Isobornyl acrylate 5888-33-5	aqua (marine water)	0,0001 mg/l		
Isobornyl acrylate 5888-33-5	sewage treatment plant (STP)	2 mg/l		
Isobornyl acrylate 5888-33-5	sediment (freshwater)		0,145 mg/kg	
Isobornyl acrylate 5888-33-5	sediment (marine water)		0,0145 mg/kg	
Isobornyl acrylate 5888-33-5	Soil		0,0285 mg/kg	
Isobornyl acrylate 5888-33-5	Predator			no potential for bioaccumulation

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	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	Workers	inhalation	Long term exposure - systemic effects		0,822 mg/m3	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	Workers	dermal	Long term exposure - systemic effects		0,233 mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	General population	inhalation	Long term exposure - systemic effects		0,145 mg/m3	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	General population	dermal	Long term exposure - systemic effects		0,0833 mg/kg	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8	General population	oral	Long term exposure - systemic effects		0,0833 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	
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
Isobornyl acrylate 5888-33-5	Workers	dermal	Long term exposure - systemic effects		1,39 mg/kg	no potential for bioaccumulation
Isobornyl acrylate 5888-33-5	General population	oral	Long term exposure - systemic effects		0,83 mg/kg	no potential for bioaccumulation
Isobornyl acrylate 5888-33-5	General population	dermal	Long term exposure - systemic effects		0,83 mg/kg	no potential for bioaccumulation

Biological Exposure Indices: None

8.2. Exposure controls:

Engineering controls: Ensure good ventilation/extraction.

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

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; ≥ 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

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

 mor mation on busic physical and chemical property	
Delivery form	liquid
Colour	black
Odor	Acrylic
Physical state	liquid
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
pH	Not applicable, Product is non-soluble (in water).
Viscosity (kinematic)	> 20,5 mm2/s
(40 °C (104 °F);)	
Viscosity, dynamic	2.000 mPa.s no method / method unknown
0	
Solubility (qualitative)	practically insoluble

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

Vapour pressure (20 °C (68 °F)) Density (20 °C (68 °F)) Relative vapour density: (20 °C) Particle characteristics

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.

Not applicable Mixture < 1,3 kPa

1,10 g/cm3 no method / method unknown

> 1

Not applicable Product is a liquid

SECTION 11: Toxicological information

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

Acute oral toxicity:

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

Hazardous substances CAS-No.	Value type	Value	Species	Method
7,7,9(or 7,9,9)-trimethyl- 4,13-dioxo-3,14-dioxa- 5,12-diazahexadecane- 1,16-diyl bismethacrylate 72869-86-4	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (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)
2-Propenoic acid, 2- methyl-, (octahydro-4,7- methano-1H-indene-5- diyl)bis(methylene) ester 43048-08-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Triacrylate ester 52408-84-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Butyl hydroxytoluene 128-37-0	LD50	> 6.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Isobornyl acrylate 5888-33-5	LD50	4.350 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
7,7,9(or 7,9,9)-trimethyl- 4,13-dioxo-3,14-dioxa- 5,12-diazahexadecane- 1,16-diyl bismethacrylate 72869-86-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
2-Propenoic acid, 2- methyl-, (octahydro-4,7- methano-1H-indene-5- diyl)bis(methylene) ester 43048-08-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Triacrylate ester 52408-84-1	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Butyl hydroxytoluene 128-37-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Isobornyl acrylate 5888-33-5	LD50	> 3.000 mg/kg	rabbit	not specified

Acute inhalative toxicity:

No data available.

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		
7,7,9(or 7,9,9)-trimethyl-	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
4,13-dioxo-3,14-dioxa-				
5,12-diazahexadecane-				
1,16-diyl bismethacrylate				
72869-86-4				
Diphenyl-2,4,6-	not irritating	24 h	rabbit	not specified
trimethylbenzoyl				
phosphine oxide				
75980-60-8				
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				
Isobornyl acrylate	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
5888-33-5				

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
7,7,9(or 7,9,9)-trimethyl- 4,13-dioxo-3,14-dioxa- 5,12-diazahexadecane- 1,16-diyl bismethacrylate 72869-86-4	not irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	not irritating		rabbit	not specified
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
7,7,9(or 7,9,9)-trimethyl- 4,13-dioxo-3,14-dioxa- 5,12-diazahexadecane- 1,16-diyl bismethacrylate 72869-86-4	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Tris(2-acryloxyethyl) isocyanurate 40220-08-4	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2-Propenoic acid, 2- methyl-, (octahydro-4,7- methano-1H-indene-5- diyl)bis(methylene) ester 43048-08-4	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triacrylate ester 52408-84-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Butyl hydroxytoluene 128-37-0	not sensitising	Draize Test	guinea pig	Draize Test
Isobornyl acrylate 5888-33-5	sensitising	Mouse local lymphnode assay (LLNA)	mouse	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	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of administration	activation / Exposure time		
Diphenyl-2,4,6-	negative	bacterial reverse	with and without		OECD Guideline 471
trimethylbenzoyl	-	mutation assay (e.g			(Bacterial Reverse Mutation
phosphine oxide		Ames test)			Assay)
75980-60-8					
Diphenyl-2,4,6-	negative	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
trimethylbenzoyl		chromosome			Mammalian Chromosome
phosphine oxide		aberration test			Aberration Test)
75980-60-8					
Diphenyl-2,4,6-	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
trimethylbenzoyl		gene mutation assay			Mammalian Cell Gene
phosphine oxide 75980-60-8					Mutation Test)
Triacrylate ester	negative	bacterial reverse	with and without		OECD Guideline 471
52408-84-1	negative	mutation assay (e.g	with and without		(Bacterial Reverse Mutation
52400-04-1		Ames test)			Assay)
Triacrylate ester	negative	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
52408-84-1	negative	chromosome	with and without		Mammalian Chromosome
52100 01 1		aberration test			Aberration Test)
Triacrylate ester	positive	mammalian cell	with and without		OECD Guideline 476 (In vitro
52408-84-1	I ····	gene mutation assay			Mammalian Cell Gene
		<i>8</i> ,			Mutation Test)
Butyl hydroxytoluene	negative	bacterial reverse	with and without		not specified
128-37-0	-	mutation assay (e.g			-
		Ames test)			
Butyl hydroxytoluene	negative	in vitro mammalian	with and without		not specified
128-37-0		chromosome			
		aberration test			
Butyl hydroxytoluene	negative	mammalian cell	with		not specified
128-37-0	-	gene mutation assay			
Isobornyl acrylate	negative	bacterial reverse	with and without		OECD Guideline 471
5888-33-5		mutation assay (e.g			(Bacterial Reverse Mutation
T 1 1 1.		Ames test) mammalian cell	with and without		Assay) OECD Guideline 476 (In vitro
Isobornyl acrylate	negative		with and without		
5888-33-5		gene mutation assay			Mammalian Cell Gene
Isobornyl acrylate	negative	in vitro mammalian	with and without	-	Mutation Test) OECD Guideline 487 (In vitro
5888-33-5	negative	cell micronucleus	with and without		Mammalian Cell
5000-55-5		test			Micronucleus Test)
Triacrylate ester	negative	oral: gavage		mouse	OECD Guideline 474
52408-84-1	negative	Siai. Suvago		mouse	(Mammalian Erythrocyte
52100 UT 1					Micronucleus Test)
Butyl hydroxytoluene 128-37-0	negative	oral: feed		rat	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)
Butyl hydroxytoluene 128-37-0	NOAEL P 500 mg/kg	Two generation study	oral: feed	rat	not specified
Isobornyl acrylate 5888-33-5	NOAEL P 100 mg/kg NOAEL F1 100 mg/kg	screening	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the 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	Species	Method
			treatment		
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	NOAEL 100 mg/kg	oral: gavage	3 m 5 d/w	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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
Isobornyl acrylate 5888-33-5	NOAEL 100 mg/kg	oral: gavage	once daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

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

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		-	-	
7,7,9(or 7,9,9)-trimethyl-4,13-	LC50	10,1 mg/1	96 h	Danio rerio	OECD Guideline 203 (Fish,
dioxo-3,14-dioxa-5,12-					Acute Toxicity Test)
diazahexadecane-1,16-diyl					
bismethacrylate					
72869-86-4					
Tris(2-acryloxyethyl)	LC50	9,43 mg/l	96 h	Danio rerio (reported as	OECD Guideline 203 (Fish,
isocyanurate				Brachydanio rerio)	Acute Toxicity Test)
40220-08-4					
2-Propenoic acid, 2-methyl-,	LC50	0,144 mg/l	96 h	Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
(octahydro-4,7-methano-1H-				Danio rerio)	Acute Toxicity Test)
indene-5-diyl)bis(methylene)					
ester					
43048-08-4					
Diphenyl-2,4,6-	LC50	1,4 mg/l	96 h	Cyprinus carpio	OECD Guideline 203 (Fish,
trimethylbenzoyl phosphine					Acute Toxicity Test)
oxide					
75980-60-8					
Triacrylate ester	LC50	5,74 mg/l	96 h	Danio rerio (reported as	OECD Guideline 203 (Fish,
52408-84-1				Brachydanio rerio)	Acute Toxicity Test)
Butyl hydroxytoluene	LC50	Toxicity > Water	96 h	Brachydanio rerio (new name:	EU Method C.1 (Acute
128-37-0		solubility		Danio rerio)	Toxicity for Fish)
Butyl hydroxytoluene	NOEC	0,053 mg/l	30 d	Oryzias latipes	OECD Guideline 210 (fish
128-37-0					early lite stage toxicity test)
Isobornyl acrylate	LC50	0,704 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
5888-33-5					Acute Toxicity Test)

Toxicity (aquatic invertebrates):

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

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
7,7,9(or 7,9,9)-trimethyl-4,13-	EC50	> 1,2 mg/l	48 h	Daphnia magna	OECD Guideline 202
dioxo-3,14-dioxa-5,12-					(Daphnia sp. Acute
diazahexadecane-1,16-diyl					Immobilisation Test)
bismethacrylate					
72869-86-4					
Tris(2-acryloxyethyl)	EC50	158,3 mg/l	48 h	Daphnia magna	OECD Guideline 202
isocyanurate					(Daphnia sp. Acute
40220-08-4					Immobilisation Test)
2-Propenoic acid, 2-methyl-,	EC50	2,36 mg/l	48 h	Daphnia magna	OECD Guideline 202
(octahydro-4,7-methano-1H-					(Daphnia sp. Acute
indene-5-diyl)bis(methylene)					Immobilisation Test)
ester					
43048-08-4					
Diphenyl-2,4,6-	EC50	3,53 mg/l	48 h	Daphnia magna	OECD Guideline 202
trimethylbenzoyl phosphine					(Daphnia sp. Acute
oxide					Immobilisation Test)
75980-60-8					
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)

Isobornyl acrylate 5888-33-5	EC50	1 mg/l	48 h	OECD Guideline 202 (Daphnia sp. Acute	
				Immobilisation Test)	

Chronic toxicity (aquatic invertebrates):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Butyl hydroxytoluene 128-37-0	NOEC	0,069 mg/l	21 d	1 0	OECD 211 (Daphnia magna, Reproduction Test)
Isobornyl acrylate 5888-33-5	NOEC	0,092 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.

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No. 7,7,9(or 7,9,9)-trimethyl-4,13- dioxo-3,14-dioxa-5,12- diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	type NOEC	0,21 mg/l	72 h	Desmodesmus subspicatus	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)
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H- indene-5-diyl)bis(methylene) ester 43048-08-4	EC50	1,6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H- indene-5-diyl)bis(methylene) ester 43048-08-4	EC10	0,64 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	EC50	> 2,01 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	EC10	1,56 mg/l	72 h	Pseudokirchneriella subcapitata	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)
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)
Isobornyl acrylate 5888-33-5	NOEC	0,405 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Isobornyl acrylate 5888-33-5	EC50	1,98 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity (microorganisms):

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

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Diphenyl-2,4,6-	EC 50	> 1.000 mg/l	30 min		OECD Guideline 209
trimethylbenzoyl phosphine		-			(Activated Sludge,
oxide					Respiration Inhibition Test)
75980-60-8					
Triacrylate ester	EC20	507 mg/l	3 h	activated sludge	OECD Guideline 209
52408-84-1		-		-	(Activated Sludge,
					Respiration Inhibition Test)
Butyl hydroxytoluene	EC50	Toxicity > Water	3 h	activated sludge	OECD Guideline 209
128-37-0		solubility			(Activated Sludge,
		-			Respiration Inhibition Test)

12.2. Persistence and degradability

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

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
7,7,9(or 7,9,9)-trimethyl-4,13- dioxo-3,14-dioxa-5,12- diazahexadecane-1,16-diyl bismethacrylate 72869-86-4	not readily biodegradable.	aerobic	22 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution 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)
2-Propenoic acid, 2-methyl-, (octahydro-4,7-methano-1H- indene-5-diyl)bis(methylene) ester 43048-08-4	not readily biodegradable.	aerobic	28 %	28 d	other guideline:
Diphenyl-2,4,6- trimethylbenzoyl phosphine oxide 75980-60-8	not readily biodegradable.	aerobic	0 - 10 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Triacrylate ester 52408-84-1	readily biodegradable	aerobic	72 - 85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution 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))
Isobornyl acrylate 5888-33-5	inherently biodegradable	aerobic	73,9 %	60 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Isobornyl acrylate 5888-33-5	not readily biodegradable.	aerobic	57 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)

12.3. Bioaccumulative potential

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

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

12.4. Mobility in soil

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

Hazardous substances	LogPow	Temperature	Method
CAS-No.	_	_	
7,7,9(or 7,9,9)-trimethyl-4,13-	3,39	20 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
dioxo-3,14-dioxa-5,12-			Method)
diazahexadecane-1,16-diyl			
bismethacrylate			
72869-86-4			
Tris(2-acryloxyethyl)	1,85	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
isocyanurate			Method)
40220-08-4			
Diphenyl-2,4,6-	3,1	23 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
trimethylbenzoyl phosphine			Method)
oxide			
75980-60-8			
Butyl hydroxytoluene	5,1		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
128-37-0			Flask Method)
Isobornyl acrylate	4,52		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
5888-33-5			Method)

12.5. Results of PBT and vPvB assessment

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

Hazardous substances	PBT / vPvB
CAS-No.	
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
5,12-diazahexadecane-1,16-diyl bismethacrylate	Bioaccumulative (vPvB) criteria.
72869-86-4	
Tris(2-acryloxyethyl) isocyanurate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
40220-08-4	Bioaccumulative (vPvB) criteria.
2-Propenoic acid, 2-methyl-, (octahydro-4,7-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
methano-1H-indene-5-diyl)bis(methylene) ester	Bioaccumulative (vPvB) criteria.
43048-08-4	
Diphenyl-2,4,6-trimethylbenzoyl phosphine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
oxide	Bioaccumulative (vPvB) criteria.
75980-60-8	
Triacrylate ester	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
52408-84-1	Bioaccumulative (vPvB) criteria.
Butyl hydroxytoluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
128-37-0	Bioaccumulative (vPvB) criteria.
Isobornyl acrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
5888-33-5	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	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. (Urethane dimethacrylate, Dicyclopentyldimethylene dimethacrylate)				
	RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane dimethacrylate, Dicyclopentyldimethylene dimethacrylate)				
	ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane dimethacrylate, Dicyclopentyldimethylene dimethacrylate)				
	IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane dimethacrylate, Dicyclopentyldimethylene dimethacrylate)				
	IATA	Environmentally hazardous substance, liquid, n.o.s. (Urethane dimethacrylate,Dicyclopentyldimethylene dimethacrylate)				
14.3.	Transport hazard class(es)					
	ADR	9				
	RID	9				
	ADN	9				
	IMDG	9				
	IATA	9				
14.4.	Packing gro	oup				
	ADR	III				
	RID	III				
	ADN	III				
	IMDG	III				
	IATA	III				
14.5.	Environme	ntal hazards				
	ADR	not applicable				
	RID	not applicable				
	ADN	not applicable				
	IMDG	Marine pollutant				
	IATA	not applicable				
14.6.	Special pre	cautions 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.

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.

Page 23 of 24

Not applicable Not applicable Not applicable

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: H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H361f Suspected of damaging fertility. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. ED: Substance identified as having endocrine disrupting properties EU OEL: Substance with a Union workplace exposure limit EU EXPLD 1: Substance listed in Annex I, Reg (EC) No. 2019/1148 Substance listed in Annex II, Reg (EC) No. 2019/1148 EU EXPLD 2

 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:

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 (SDSinfo.Adhesive@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,

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.