

Loctite 243

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

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SDS No.: 316211 V009.1

Revision: 06.06.2024

printing date: 26.11.2024

Replaces version from: 14.05.2024

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

1.1. Product identifier

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

SDSinfo.Adhesive@henkel.com

For Safety Data Sheet updates please visit our website www.mysds.henkel.com or www.henkel-adhesives.com.

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains Tetramethylene dimethacrylate

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maleic acid

Acetic acid, 2-phenylhydrazide

Signal word: Warning

Hazard statement: H317 May cause an allergic skin reaction.

H412 Harmful 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:

Prevention

P273 Avoid release to the environment.

P280 Wear protective gloves.

Precautionary statement:

Response

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 ≥ 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

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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
Tetramethylene dimethacrylate 2082-81-7 218-218-1 01-2119967415-30	25- 50 %	Skin Sens. 1B, H317		
2,4,6-Triallyloxy-s-triazine 101-37-1 202-936-7 01-2119489756-17	5-< 10 %	Acute Tox. 4, Oral, H302 Aquatic Chronic 2, H411		
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy]met hyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1 302-434-9	1-< 5 %	Eye Irrit. 2, H319 Aquatic Chronic 2, H411		
Cumene hydroperoxide 80-15-9 201-254-7 01-2119475796-19	0,1-< 1 %	STOT RE 2, H373 Skin Corr. 1B, H314 Acute Tox. 2, Inhalation, H330 Aquatic Chronic 2, H411 Acute Tox. 4, Oral, H302 Acute Tox. 4, Dermal, H312 Org. Perox. E, H242 STOT SE 3, H335	Eye Irrit. 2; H319; C 1 - < 3 % Skin Irrit. 2; H315; C 3 - < 10 % Eye Dam. 1; H318; C 3 - < 10 % STOT SE 3; H335; C >= 1 % Skin Corr. 1B; H314; C >= 10 % ===== dermal:ATE = 1.100 mg/kg	
maleic acid 110-16-7 203-742-5 01-2119488705-25	0,1-< 1 %	Acute Tox. 4, Oral, H302 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4, Dermal, H312	Skin Sens. 1; H317; C >= 0,1 %	
Acetic acid, 2-phenylhydrazide 114-83-0 204-055-3 01-2120951382-56	0,1-< 1 %	Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Acute Tox. 4, Oral, H302 Skin Sens. 1, H317 Carc. 2, H351	M acute = 1 M chronic = 1	
methacrylic acid 79-41-4 201-204-4 01-2119463884-26	0,1-< 1 %	Acute Tox. 4, Oral, H302 Acute Tox. 3, Dermal, H311 Acute Tox. 4, Inhalation, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	STOT SE 3; H335; C >= 1 % ====== dermal:ATE = 500 mg/kg inhalation:ATE = 3,19 mg/l;dust/mist	
1,4-Naphthalenedione 130-15-4 204-977-6	0,0025-< 0,025 % (25 ppm- < 250 ppm)	Acute Tox. 3, Oral, H301 Skin Corr. 1C, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Acute Tox. 1, Inhalation, H330 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M acute = 10 M chronic = 1	

If no ATE values are displayed, please refer to LD/LC50 values in Section 11. For full text of the H - statements and other abbreviations see section 16 "Other information".

SECTION 4: First aid measures

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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.

Prolonged or repeated contact may cause eye irritation.

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

Dispose of contaminated material as waste according to Section 13.

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.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

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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. Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Refer to Technical Data Sheet.

7.3. Specific end use(s)

Adhesive

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silane, dichlorodimethyl-, reaction products with silica 7631-86-9		4	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Silane, dichlorodimethyl-, reaction products with silica 7631-86-9		10	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Silane, dichlorodimethyl-, reaction products with silica 7631-86-9		1,25	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Silane, dichlorodimethyl-, reaction products with silica 7631-86-9			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Ethene, homopolymer 9002-88-4		1,25	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Ethene, homopolymer 9002-88-4		10	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Ethene, homopolymer 9002-88-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Methacrylic acid 79-41-4	50	180	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Methacrylic acid 79-41-4			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900

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Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure	Value				Remarks	
	Сотратолого	periou	mg/l	ppm	mg/kg	others		
Tetramethylene dimethacrylate 2082-81-7	aqua (freshwater)		0,043 mg/l					
Tetramethylene dimethacrylate 2082-81-7	aqua (marine water)		0,004 mg/l					
Tetramethylene dimethacrylate 2082-81-7	aqua (intermittent releases)		0,098 mg/l					
Tetramethylene dimethacrylate 2082-81-7	sewage treatment plant (STP)		2 mg/l					
Tetramethylene dimethacrylate 2082-81-7	sediment (freshwater)				3,12 mg/kg			
Tetramethylene dimethacrylate 2082-81-7	sediment (marine water)				0,312 mg/kg			
Tetramethylene dimethacrylate 2082-81-7	Soil				0,573 mg/kg			
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	aqua (freshwater)		0,007 mg/l					
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	aqua (marine water)		0,001 mg/l					
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	Freshwater - intermittent		0,07 mg/l					
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	sediment (freshwater)				0,173 mg/kg			
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	sediment (marine water)				0,017 mg/kg			
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	Soil				0,057 mg/kg			
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	sewage treatment plant (STP)		10 mg/l					
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	oral				0,119 mg/kg			
2-[[2,2-Bis[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	aqua (freshwater)		0,0012 mg/l					
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	Soil				0,096 mg/kg			
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	sediment (marine water)				0,005 mg/kg			
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	sediment (freshwater)				0,048 mg/kg			
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	sewage treatment plant (STP)		100 mg/l					
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	aqua (intermittent releases)		0,012 mg/l					
2-[[2,2-Bis[[(1- oxoallyl)oxy]methyl]butoxy]methyl]-2- ethyl-1,3-propanediyl diacrylate 94108-97-1	aqua (marine water)		0,00012 mg/l					
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)		0,0031 mg/l					
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l					

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.alpha.,.alphaDimethylbenzyl	aqua (marine	0.00031		1
hydroperoxide	water)	mg/l		
80-15-9	,	11-8/2		
.alpha.,.alphaDimethylbenzyl	sewage	0,35 mg/l		
hydroperoxide	treatment plant			
80-15-9	(STP)			
.alpha.,.alphaDimethylbenzyl	sediment		0,023	
hydroperoxide	(freshwater)		mg/kg	
80-15-9				
.alpha.,.alphaDimethylbenzyl	sediment		0,0023	
hydroperoxide	(marine water)		mg/kg	
80-15-9				
.alpha.,.alphaDimethylbenzyl	Soil		0,0029	
hydroperoxide			mg/kg	
80-15-9				
Maleic acid	aqua	0,1 mg/l		
110-16-7	(freshwater)			
Maleic acid	aqua	0,4281		
110-16-7	(intermittent	mg/l		
	releases)			
Maleic acid	sediment		0,334	
110-16-7	(freshwater)		mg/kg	
Maleic acid	sewage	44,6 mg/l		
110-16-7	treatment plant			
	(STP)			
Maleic acid	aqua (marine	0,01 mg/l		
110-16-7	water)			
Maleic acid	sediment		0,0334	
110-16-7	(marine water)		mg/kg	
Maleic acid	Soil		0,0415	
110-16-7			mg/kg	
methacrylic acid	aqua	0,82 mg/l		
79-41-4	(freshwater)			
methacrylic acid	Freshwater -	0,45 mg/l		
79-41-4	intermittent			
methacrylic acid	aqua (marine	0,082 mg/l		
79-41-4	water)			
methacrylic acid	sewage	100 mg/l		
79-41-4	treatment plant			
	(STP)			
methacrylic acid	sediment		3,09 mg/kg	
79-41-4	(freshwater)			
methacrylic acid	sediment		0,309	
79-41-4	(marine water)		mg/kg	
methacrylic acid	Soil		0,137	
79-41-4			mg/kg	
methacrylic acid	Predator			no potential for
79-41-4				bioaccumulation

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Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetramethylene dimethacrylate	Workers	dermal	Long term		4,2 mg/kg	
2082-81-7			exposure - systemic effects			
Tetramethylene dimethacrylate	Workers	inhalation	Long term		14,5 mg/m3	
2082-81-7			exposure -		,- 8	
			systemic effects		1.0 / 0	
Tetramethylene dimethacrylate 2082-81-7	General population	inhalation	Long term exposure -		4,3 mg/m3	
2002-01-7	population		systemic effects			
Tetramethylene dimethacrylate	General	dermal	Long term		2,5 mg/kg	
2082-81-7	population		exposure -			
Tetramethylene dimethacrylate	General	oral	systemic effects Long term		2,5 mg/kg	
2082-81-7	population	orar	exposure -		2,5 mg/kg	
			systemic effects			
2,4,6-Triallyloxy-1,3,5-triazine	Workers	inhalation	Acute/short term		134,4 mg/m3	
101-37-1			exposure - systemic effects			
2,4,6-Triallyloxy-1,3,5-triazine	Workers	dermal	Long term		1,5 mg/kg	
101-37-1			exposure -		, , ,	
	1		systemic effects			
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	Workers	inhalation	Long term exposure -		2,12 mg/m3	
101-37-1			systemic effects			
2,4,6-Triallyloxy-1,3,5-triazine	General	inhalation	Long term		0,52 mg/m3	
101-37-1	population		exposure -			
246 77 11 1 1 25 11 1	G 1	1 1	systemic effects		0.75	
2,4,6-Triallyloxy-1,3,5-triazine 101-37-1	General population	dermal	Long term exposure -		0,75 mg/kg	
101-37-1	population		systemic effects			
2,4,6-Triallyloxy-1,3,5-triazine	General	oral	Long term		0,15 mg/kg	
101-37-1	population		exposure -			
.alpha.,.alphaDimethylbenzyl	Workers	inhalation	systemic effects Long term		6 mg/m3	
hydroperoxide	Workers	Illiaiation	exposure -		o mg/ms	
80-15-9			systemic effects			
Maleic acid	Workers	dermal	Acute/short term			
110-16-7			exposure - local effects			
Maleic acid	Workers	dermal	Long term			
110-16-7	VV OTRETS	dermar	exposure - local			
			effects			
Maleic acid	Workers	dermal	Acute/short term			
110-16-7			exposure - systemic effects			
Maleic acid	Workers	dermal	Long term			
110-16-7			exposure -			
2611	*** .		systemic effects		2 / 2	
Maleic acid 110-16-7	Workers	inhalation	Acute/short term exposure - local		3 mg/m3	
110-10-7			effects			
Maleic acid	Workers	inhalation	Long term		3 mg/m3	
110-16-7			exposure -			
Malaia acid	Wankana	inholotion	systemic effects		2 m c/m 2	
Maleic acid 110-16-7	Workers	inhalation	Long term exposure - local		3 mg/m3	
	<u> </u>		effects	<u> </u>		
Maleic acid	Workers	inhalation	Acute/short term		3 mg/m3	
110-16-7			exposure -			
methacrylic acid	Workers	Inhalation	systemic effects Long term		88 mg/m3	no potential for
79-41-4	,, orkers	11111a1at1UII	exposure - local		oo mg/ms	bioaccumulation
			effects			
methacrylic acid	Workers	Inhalation	Long term		29,6 mg/m3	no potential for
79-41-4			exposure - systemic effects			bioaccumulation
methacrylic acid	Workers	dermal	Long term		4,25 mg/kg	no potential for
79-41-4			exposure -		, ,	bioaccumulation

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			systemic effects		
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - local effects	6,55 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - systemic effects	6,3 mg/m3	no potential for bioaccumulation
methacrylic acid 79-41-4	General population	dermal	Long term exposure - systemic effects	2,55 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

Delivery form liquid
Colour blue
Odor mild, Acrylic
Physical state liquid

Melting point Not applicable, Product is a liquid

Solidification temperature < -30 °C (< -22 °F) Initial boiling point > 150 °C (> 302 °F)

Flammability The product is not flammable.

Explosive limits Not applicable, The product is not flammable.

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Flash point $> 100 \,^{\circ}\text{C} \, (> 212 \,^{\circ}\text{F})$

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

Soluble

Not applicable, Product is non-polar/aprotic.

Viscosity (kinematic) > 20,5 mm2/s

(40 °C (104 °F);)
Solubility (qualitative)
(Solvent: Acetone)

Solubility (qualitative) Slight (20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water Not applicable Mixture

Vapour pressure < 0.1 mm hg $(27 \,^{\circ}\text{C} (80.6 \,^{\circ}\text{F}))$

Vapour pressure 1,7 mbar

 $(25 \, ^{\circ}\text{C} \, (77 \, ^{\circ}\text{F}))$ Vapour pressure $< 300 \, \text{mbar}; \text{no method / method unknown}$

(50 °C (122 °F)) Vapour pressure < 0,13 mbar

(20 °C (68 °F))

Density 1,08 g/cm3 no method / method unknown

(20 °C (68 °F))
Relative vapour density: > 1

Relative vapour density: > (20 °C)

Particle characteristics 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.

Acids.

Reducing agents. Strong bases.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

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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	Value	Species	Method
Tetramethylene dimethacrylate 2082-81-7	LD50	10.066 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
2,4,6-Triallyloxy-s- triazine 101-37-1	LD50	753 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]buto xy]methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	382 mg/kg	rat	other guideline:
maleic acid 110-16-7	LD50	708 mg/kg	rat	not specified
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	310 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
methacrylic acid 79-41-4	LD50	1.320 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
1,4-Naphthalenedione 130-15-4	LD50	124 mg/kg	rat	equivalent or similar to 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 CAS-No.	Value	Value	Species	Method
Tetramethylene dimethacrylate 2082-81-7	LD50	> 3.000 mg/kg	rabbit	not specified
2,4,6-Triallyloxy-s- triazine 101-37-1	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2-[[2,2-bis][(1- oxoallyl)oxy]methyl]buto xy]methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	LD50	> 2.000 mg/kg	rat	not specified
Cumene hydroperoxide 80-15-9	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
maleic acid 110-16-7	LD50	1.560 mg/kg	rabbit	not specified
methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening
methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg		Expert judgement

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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		Species	Method
CAS-No.	type			time		
Cumene hydroperoxide 80-15-9	LC50	1,370 mg/l	vapour	4 h	rat	not specified
methacrylic acid 79-41-4	LC50	3,19 - 6,5 mg/l	dust/mist	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)
methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	3,19 mg/l	dust/mist			Expert judgement
1,4-Naphthalenedione 130-15-4	LC50	0,046 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	not irritating	24 h	rabbit	FDA Guideline
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
maleic acid 110-16-7	irritating	24 h	human	Patch Test
Acetic acid, 2- phenylhydrazide 114-83-0	not corrosive		Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE)	OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method)
Acetic acid, 2- phenylhydrazide 114-83-0	not irritating		Human, EpiSkinTM (SM), Reconstructed Human Epidermis (RHE)	OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method)
methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
1,4-Naphthalenedione 130-15-4	Category 1C (corrosive)		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]buto xy]methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	Category 2 (irritant)		rabbit	EU Method B.5 (Acute Toxicity: Eye Irritation / Corrosion)
maleic acid 110-16-7	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Acetic acid, 2- phenylhydrazide 114-83-0	not irritating		Chicken, eye, isolated	OECD Guideline 438 (Isolated Chicken Eye Test Method)
methacrylic acid 79-41-4	corrosive		rabbit	Draize Test

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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
Tetramethylene dimethacrylate 2082-81-7	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Acetic acid, 2- phenylhydrazide 114-83-0	positive	Direct peptide reactivity assay (DPRA)	cysteine and lysine, in chemico test	OECD Guideline 442C (Direct Peptide Reactivity Assay (DPRA))
Acetic acid, 2- phenylhydrazide 114-83-0	positive	Activation of keratinocytes	human keratinocytes, in vitro test	OECD Guideline 442D (ARE-Nrf2 Luciferase Test Method)
Acetic acid, 2- phenylhydrazide 114-83-0	positive	activation of dendritic cells	human monocytes, in vitro test	OECD Guideline 442E (H-CLAT: Human Cell Line Activation Test)
methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
1,4-Naphthalenedione 130-15-4	sensitising	not specified	guinea pig	not specified

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
Tetramethylene dimethacrylate 2082-81-7	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Tetramethylene dimethacrylate 2082-81-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Tetramethylene dimethacrylate 2082-81-7	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
maleic acid 110-16-7	negative	bacterial reverse mutation assay (e.g Ames test)	no data		Ames Test
maleic acid 110-16-7	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acetic acid, 2- phenylhydrazide 114-83-0	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Acetic acid, 2- phenylhydrazide 114-83-0	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)

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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
maleic acid 110-16-7	not carcinogenic	oral: feed	2 y daily	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
Acetic acid, 2- phenylhydrazide 114-83-0	carcinogenic	oral: drinking water	continuous	mouse	male/female	not specified
methacrylic acid 79-41-4	not carcinogenic	inhalation	2 y	mouse	male/female	OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
maleic acid 110-16-7	NOAEL F1 150 mg/kg NOAEL F2 55 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
methacrylic acid 79-41-4	NOAEL P 50 mg/kg NOAEL F1 400 mg/kg NOAEL F2 400 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

STOT-single exposure:

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

Hazardous substances CAS-No.	Assessment	Route of exposure	Target Organs	Remarks
methacrylic acid	May cause respiratory irritation.			

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
Cumene hydroperoxide		inhalation:	6 h/d	rat	not specified
80-15-9		aerosol	5 d/w		
maleic acid	NOAEL >= 40 mg/kg	oral: feed	90 d	rat	OECD Guideline 408
110-16-7			daily		(Repeated Dose 90-Day
					Oral Toxicity in Rodents)
methacrylic acid		inhalation	90 d	rat	OECD Guideline 413
79-41-4			6 h/d, 5 d/w		(Subchronic Inhalation
					Toxicity: 90-Day)

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

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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 CAS-No.	Value type	Value	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	LC50	32,5 mg/l	48 h		DIN 38412-15
2,4,6-Triallyloxy-s-triazine 101-37-1	LC50	4,36 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	LC50	1,2 mg/l	96 h	Cyprinus carpio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
maleic acid 110-16-7	LC50	> 245 mg/l	48 h	Leuciscus idus	DIN 38412-15
methacrylic acid 79-41-4	LC50	85 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
methacrylic acid 79-41-4	NOEC	10 mg/l	35 d	Danio rerio	OECD Guideline 210 (fish early lite stage toxicity test)
1,4-Naphthalenedione 130-15-4	LC50	0,045 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish, 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				
2,4,6-Triallyloxy-s-triazine	EC50	19,4 mg/l	48 h	Daphnia magna	OECD Guideline 202
101-37-1					(Daphnia sp. Acute
					Immobilisation Test)
2-[[2,2-bis[[(1-	EC50	> 10 - 100 mg/l	48 h	Daphnia magna	OECD Guideline 202
oxoallyl)oxy]methyl]butoxy]					(Daphnia sp. Acute
methyl]-2-ethyl-1,3-					Immobilisation Test)
propanediyl diacrylate 94108-97-1					
Cumene hydroperoxide	EC50	18,84 mg/l	48 h	Daphnia magna	OECD Guideline 202
80-15-9					(Daphnia sp. Acute
					Immobilisation Test)
maleic acid	EC50	42,81 mg/l	48 h	Daphnia magna	OECD Guideline 202
110-16-7					(Daphnia sp. Acute
					Immobilisation Test)
Acetic acid, 2-	EC50	1,1 mg/l	48 h	Daphnia magna	OECD Guideline 202
phenylhydrazide					(Daphnia sp. Acute
114-83-0					Immobilisation Test)
methacrylic acid	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS 797.1300
79-41-4					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)
1,4-Naphthalenedione	EC50	0,026 mg/l	48 h	Daphnia magna	OECD Guideline 202
130-15-4					(Daphnia sp. Acute
					Immobilisation Test)

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Chronic toxicity (aquatic invertebrates):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	NOEC	5,09 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
maleic acid 110-16-7	NOEC	10 mg/l	21 d	Daphnia magna	other guideline:
methacrylic acid 79-41-4	NOEC	53 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

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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 CAS-No.	Value type	Value	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	EC50	9,79 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tetramethylene dimethacrylate 2082-81-7	NOEC	2,11 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	EC50	> 12 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	NOEC	> 0,1 - 1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC50	3,1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	NOEC	1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic acid 110-16-7	EC50	74,35 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic acid 110-16-7	EC10	11,8 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acetic acid, 2- phenylhydrazide 114-83-0	EC50	0,258 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acetic acid, 2- phenylhydrazide 114-83-0	NOEC	0,012 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	NOEC	8,2 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	EC50	45 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,4-Naphthalenedione 130-15-4	NOEC	0,07 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,4-Naphthalenedione 130-15-4	EC50	0,42 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		-	1	
Tetramethylene dimethacrylate 2082-81-7	NOEC	20 mg/l	28 d	activated sludge, domestic	not specified
2,4,6-Triallyloxy-s-triazine 101-37-1	EC0	5 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	30 min	not specified	not specified
maleic acid 110-16-7	EC10	44,6 mg/l	18 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
methacrylic acid 79-41-4	EC10	100 mg/l	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)

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1,4-Naphthalenedione	EC50	5,94 mg/l	3 h	activated sludge of a	OECD Guideline 209
130-15-4				predominantly domestic sewage	(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
Tetramethylene dimethacrylate 2082-81-7	readily biodegradable	aerobic	84 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
2,4,6-Triallyloxy-s-triazine 101-37-1		aerobic	> 7 - 9 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1		aerobic	4 - 14 %	29 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Cumene hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
maleic acid 110-16-7	readily biodegradable	aerobic	97,08 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Acetic acid, 2- phenylhydrazide 114-83-0	not readily biodegradable.	aerobic	39 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	14 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
1,4-Naphthalenedione 130-15-4	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry 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
Cumene hydroperoxide	9,1			calculation	OECD Guideline 305
80-15-9					(Bioconcentration: Flow-through
					Fish Test)

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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.	Logiow	remperature	Treelou .
Tetramethylene dimethacrylate 2082-81-7	3,1		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
2,4,6-Triallyloxy-s-triazine 101-37-1	2,8	20 °C	not specified
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	4,14	30 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Cumene hydroperoxide 80-15-9	1,6	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
maleic acid 110-16-7	-1,3	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74		QSAR (Quantitative Structure Activity Relationship)
methacrylic acid 79-41-4	0,93	22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
1,4-Naphthalenedione 130-15-4	1,71		not specified

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.	
Tetramethylene dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2082-81-7	Bioaccumulative (vPvB) criteria.
2,4,6-Triallyloxy-s-triazine	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
101-37-1	Bioaccumulative (vPvB) criteria.
2-[[2,2-bis[[(1-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-	Bioaccumulative (vPvB) criteria.
1,3-propanediyl diacrylate	
94108-97-1	
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-15-9	Bioaccumulative (vPvB) criteria.
maleic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
110-16-7	Bioaccumulative (vPvB) criteria.
Acetic acid, 2-phenylhydrazide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
114-83-0	Bioaccumulative (vPvB) criteria.
methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.
1,4-Naphthalenedione	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
130-15-4	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

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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	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.2. UN proper shipping name

Not dangerous goods
Not dangerous goods

14.3. Transport hazard class(es)

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.4. Packing group

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR not applicable

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RID not applicable
ADN not applicable
IMDG not applicable
IATA 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): Not applicable Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Not applicable Persistent organic pollutants (Regulation (EU) 2019/1021): Not applicable

VOC content < 3 %

(2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK: WGK 2: significantly water endangering (Ordinance on facilities for handling

substances that are hazardous to water (AwSV)) Classification according to AwSV, Annex 1 (5.2)

Storage class according to TRGS 510: 10

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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:

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful 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.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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.

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
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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