

LOCTITE 248

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

Page 1 of 18

SDS No.: 453681 V008.1

Revision: 15.11.2022

printing date: 28.11.2022

Replaces version from: 31.08.2021

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

1.1. Product identifier

LOCTITE 248

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 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 irritation Category 2

H319 Causes serious eye irritation.

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

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

Acetic acid, 2-phenylhydrazide

Signal word: Warning

Hazard statement: H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement: P273 Avoid release to the environment.

Prevention P280 Wear protective gloves.

P261 Avoid breathing vapors.

Precautionary statement: P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Response P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Following substances are present in a concentration >= 0.1% and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration ≥ the concentration limit 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	Concentration	Classification	Specific Conc. Limits, M-	Add.
CAS-No. EC Number REACH-Reg No.			factors and ATEs	Information
Tetramethylene dimethacrylate 2082-81-7 218-218-1 01-2119967415-30	10- 20 %	Skin Sens. 1B, H317 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	STOT SE 3; H335; C >= 10 %	
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		
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2 204-613-6 01-2119978265-26	1-< 3 %	Aquatic Chronic 4, H413		
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	
N,N-Diethyl-p-toluidine 613-48-9 210-345-0	0,1-< 1 %	Acute Tox. 3, Oral, H301 Acute Tox. 3, Dermal, H311 Acute Tox. 3, Inhalation, H331 STOT RE 2, H373 Aquatic Chronic 3, H412		
Acetic acid, 2-phenylhydrazide 114-83-0 204-055-3	0,1-< 1 %	Acute Tox. 3, Oral, H301 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, Inhalation, H335 Carc. 2, H351		
N,N-dimethyl-o-toluidine 609-72-3 210-199-8	0,1-< 1 %	STOT RE 2, H373 Acute Tox. 3, Oral, H301 Acute Tox. 3, Dermal, H311 Acute Tox. 3, Inhalation, H331 Aquatic Chronic 3, H412		
1,4-Naphthalenedione 130-15-4 204-977-6	0,01-< 0,1 %	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	

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.

EYE: Irritation, conjunctivitis.

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.

Scrape up as much material as possible.

Sweep up spilled material. Avoid creating dust.

Store in a partly filled, closed container until disposal.

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. 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 Keep container tightly sealed.

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Ethene, homopolymer 9002-88-4 [DUST, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Ethene, homopolymer 9002-88-4 [DUST, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Ethene, homopolymer 9002-88-4 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Ethene, homopolymer 9002-88-4 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	F		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		0,098 mg/l				
	releases)						
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-[[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				
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2	sewage treatment plant (STP)		0,1 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				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sewage treatment plant (STP)		0,35 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Soil				0,0029 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetramethylene dimethacrylate 2082-81-7	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
Tetramethylene dimethacrylate 2082-81-7	Workers	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
Tetramethylene dimethacrylate 2082-81-7	General population	inhalation	Long term exposure - systemic effects		4,3 mg/m3	
Tetramethylene dimethacrylate 2082-81-7	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	
Tetramethylene dimethacrylate 2082-81-7	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

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

Dust mask, P2 particle filter.

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

Eye protection:

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

Skin protection:

Wear suitable protective clothing.

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

Advices to personal protection equipment:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state solid

Delivery form Currently under determination

Colour blue

Odor characteristic Melting point Not available.

Solidification temperature

Not applicable, Product is a solid.

Initial boiling point

> 149 °C (> 300.2 °F)None

Flammability

Currently under determination

Explosive limits

Currently under determination

Flash point Product is a solid.

Auto-ignition temperature

Not applicable, Product is a solid.

Currently under determination

pH Not applicable, Product reacts with water.

Viscosity (kinematic) Not applicable, Product is a solid.

Solubility (qualitative) Slight

(Solvent: Water)

Partition coefficient: n-octanol/water Currently under determination Vapour pressure Currently under determination

Density 1,1 g/cm3 no method

()

Relative vapour density: Not available.

Particle characteristics Currently under determination

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.

SECTION 11: Toxicological information

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

Acute oral toxicity:

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

Hazardous substances CAS-No.	Value type	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-[[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)
N,N'-Ethane-1,2- diylbis(12- hydroxyoctadecan-1- amide) 123-26-2	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Cumene hydroperoxide 80-15-9	LD50	382 mg/kg	rat	other guideline:
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	270 mg/kg	rat	not specified
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 type	Value	Species	Method
Tetramethylene dimethacrylate 2082-81-7	LD50	> 3.000 mg/kg	rabbit	not specified
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

Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Cumene hydroperoxide 80-15-9	LC50	1,370 mg/l	vapour	4 h	rat	not specified
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	Result	Exposure	Species	Method
CAS-No.		time		
Cumene hydroperoxide	corrosive		rabbit	Draize Test
80-15-9				
1,4-Naphthalenedione	Category 1C		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
130-15-4	(corrosive)			

Serious eye damage/irritation:

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

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
2-[[2,2-bis[[(1-	Category 2		rabbit	EU Method B.5 (Acute Toxicity: Eye Irritation /
oxoallyl)oxy]methyl]buto	(irritant)			Corrosion)
xy]methyl]-2-ethyl-1,3-				
propanediyl diacrylate				
94108-97-1				

Respiratory or skin sensitization:

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

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
Tetramethylene	sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
dimethacrylate		assay (LLNA)		Local Lymph Node Assay)
2082-81-7		_		
N,N'-Ethane-1,2-	not sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
diylbis(12-		assay (LLNA)		Local Lymph Node Assay)
hydroxyoctadecan-1-				
amide)				
123-26-2				
1,4-Naphthalenedione	sensitising	not specified	guinea pig	not specified
130-15-4				-

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)

α	•		•	• .
Ca	rcin	ogen	nc	HV
~		9		

No data available.

Reproductive toxicity:

No data available.

STOT-single exposure:

No data available.

STOT-repeated exposure::

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

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide		inhalation:	6 h/d	rat	not specified
80-15-9		aerosol	5 d/w		

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Tetramethylene	LC50	32,5 mg/l	48 h		DIN 38412-15
dimethacrylate					
2082-81-7					
2-[[2,2-bis[[(1-	LC50	1,2 mg/l	96 h	Cyprinus carpio	OECD Guideline 203 (Fish,
oxoallyl)oxy]methyl]butoxy]					Acute Toxicity Test)
methyl]-2-ethyl-1,3-					
propanediyl diacrylate					
94108-97-1					
N,N'-Ethane-1,2-diylbis(12-	LL50	Toxicity > Water	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
hydroxyoctadecan-1-amide)		solubility			Acute Toxicity Test)
123-26-2					
Cumene hydroperoxide	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
80-15-9					Acute Toxicity Test)
N,N-dimethyl-o-toluidine	LC 50	46 mg/l	96 h	Fathead minnow (Pimephales	
609-72-3				promelas)	
1,4-Naphthalenedione	LC50	0,045 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish,
130-15-4					Acute Toxicity Test)

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2-[[2,2-bis[[(1- oxoallyl)oxy]methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	EC50	> 10 - 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	EL50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	EC50	18,84 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,4-Naphthalenedione 130-15-4	EC50	0,026 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Tetramethylene	NOEC	5,09 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
dimethacrylate					magna, Reproduction Test)
2082-81-7					

Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_	1	
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	< 0,35 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	NOEC	Toxicity > Water solubility	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)
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 to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Tetramethylene dimethacrylate 2082-81-7	NOEC	20 mg/l	28 d	activated sludge, domestic	not specified
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	30 min	not specified	not specified
1,4-Naphthalenedione 130-15-4	EC50	5,94 mg/l		activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

12.2. Persistence and degradability

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-[[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)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	not readily biodegradable.	aerobic	22 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Cumene hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
N,N-Diethyl-p-toluidine 613-48-9	not readily biodegradable.		1 %	14 d	other guideline:
N,N-dimethyl-o-toluidine 609-72-3	not readily biodegradable.		1 %	14 d	other guideline:
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

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)

12.4. Mobility in soil

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Tetramethylene dimethacrylate 2082-81-7	3,1		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
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)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	5,86		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)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74		not specified
1,4-Naphthalenedione 130-15-4	1,71		not specified

12.5. Results of PBT and vPvB assessment

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-[[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	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1-amide)	Bioaccumulative (vPvB) criteria.
123-26-2	
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-15-9	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

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

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

Not applicable Not applicable Not applicable

VOC content (2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

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

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

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.

H331 Toxic 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.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

FD. 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 SVHC: Substance of very high concern (REACH Candidate List) PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria

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

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.