



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

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LOCTITE 574 HG

SDS No. : 153497

V013.0

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

1.1. Product identifier

LOCTITE 574 HG

UFI: DEQN-WWNP-R202-626J

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

Intended use:

Anaerobic Sealant

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 www.mysds.henkel.com or www.henkel-adhesives.com.

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin sensitizer

Category 1

H317 May cause an allergic skin reaction.

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

Acetic acid, 2-phenylhydrazide

maleic acid

Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide),
Octadecanamide, 12-hydroxy-N-[2-[(1-oxooctadecyl)amino]ethyl]

Signal word:	Warning
Hazard statement:	H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement:	P273 Avoid release to the environment.
Prevention	P280 Wear protective gloves.
Precautionary statement:	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
Response	

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
Decan-1-ol 112-30-1 203-956-9 01-2119480407-35	5- < 10 %	Eye Irrit. 2, H319 Aquatic Chronic 3, H412	inhalation:ATE = 5,1 mg/l;dust/mist	
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	
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	
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 %	
Reaction mass of N,N'-ethane- 1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-N- [2-[(1-oxooctadecyl)amino]ethyl] ----- 204-613-6 01-2119978265-26	0,1- < 1 %	Skin Sens. 1, H317		
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	
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7- dimethylxanthylum chloride 3068-39-1 221-326-1 01-2120107344-68	0,01- < 0,1 %	Acute Tox. 4, Oral, H302 Acute Tox. 2, Inhalation, H330 Skin Sens. 1B, H317 Eye Dam. 1, H318 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

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.

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 (NO_x) 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

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)

Anaerobic Sealant

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
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
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

Occupational Exposure LimitsValid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
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
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

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Decan-1-ol 112-30-1	aqua (freshwater)		0,021 mg/l				
Decan-1-ol 112-30-1	aqua (marine water)		0,002 mg/l				
Decan-1-ol 112-30-1	Soil				0,63 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)		0,0031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sewage treatment plant (STP)		0,35 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Soil				0,0029 mg/kg		
Maleic acid 110-16-7	aqua (freshwater)		0,1 mg/l				
Maleic acid 110-16-7	aqua (intermittent releases)		0,4281 mg/l				
Maleic acid 110-16-7	sediment (freshwater)				0,334 mg/kg		
Maleic acid 110-16-7	sewage treatment plant (STP)		44,6 mg/l				
Maleic acid 110-16-7	aqua (marine water)		0,01 mg/l				
Maleic acid 110-16-7	sediment (marine water)				0,0334 mg/kg		
Maleic acid 110-16-7	Soil				0,0415 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Decan-1-ol 112-30-1	Workers	inhalation	Long term exposure - systemic effects		176 mg/m3	
Decan-1-ol 112-30-1	Workers	inhalation	Long term exposure - local effects		129 mg/m3	
Decan-1-ol 112-30-1	Workers	dermal	Long term exposure - systemic effects		250 mg/kg	
Decan-1-ol 112-30-1	Workers	dermal	Long term exposure - local effects		0,19 mg/cm2 190 µg/cm2	
Decan-1-ol 112-30-1	General population	inhalation	Long term exposure - systemic effects		43,5 mg/m3	
Decan-1-ol 112-30-1	General population	dermal	Long term exposure - systemic effects		125 mg/kg	
Decan-1-ol 112-30-1	General population	dermal	Long term exposure - local effects		0,067 mg/cm2 67 µg/cm2	
Decan-1-ol 112-30-1	General population	oral	Long term exposure - systemic effects		12,5 mg/kg	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
Maleic acid 110-16-7	Workers	dermal	Acute/short term exposure - local effects			
Maleic acid 110-16-7	Workers	dermal	Long term exposure - local effects			
Maleic acid 110-16-7	Workers	dermal	Acute/short term exposure - systemic effects			
Maleic acid 110-16-7	Workers	dermal	Long term exposure - systemic effects			
Maleic acid 110-16-7	Workers	inhalation	Acute/short term exposure - local effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Long term exposure - systemic effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Long term exposure - local effects		3 mg/m3	
Maleic acid 110-16-7	Workers	inhalation	Acute/short term exposure - systemic effects		3 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	Workers	inhalation	Long term exposure - systemic effects		35,24 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	Workers	inhalation	Acute/short term exposure - systemic effects		35,24 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	Workers	inhalation	Long term exposure - local effects		3,35 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	Workers	inhalation	Acute/short term exposure - local effects		3,35 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	General population	inhalation	Long term exposure - systemic effects		8,69 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	General population	inhalation	Acute/short term exposure -		8,69 mg/m3	

-----			systemic effects			
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	General population	inhalation	Long term exposure - local effects		0,83 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	General population	inhalation	Acute/short term exposure - local effects		0,83 mg/m3	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	General population	oral	Long term exposure - systemic effects		5 mg/kg	
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) -----	General population	oral	Acute/short term exposure - systemic effects		5 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

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

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 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

light orange

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)None
Flammability	The product is not flammable.
Explosive limits	Not applicable, The product is not flammable.
Flash point	> 100,00 °C (> 212 °F); Pensky Martens closed cup No flash point up to 100 °C
Auto-ignition temperature	> 300 °C (> 572 °F)
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-polar/aprotic.
Viscosity (kinematic) (40 °C (104 °F);)	> 20,5 mm ² /s
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Slight
Partition coefficient: n-octanol/water	Not applicable
Vapour pressure (27,0 °C (80,6 °F))	Mixture 6,6700000 mbar
Vapour pressure (50 °C (122 °F))	< 300 mbar;no method / method unknown
Vapour pressure (20 °C (68 °F))	< 0,13 mbar
Density (20 °C (68 °F))	1,15 g/cm ³ None
Relative vapour density: (20 °C)	> 1
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.

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
Decan-1-ol 112-30-1	LD50	> 5.000 mg/kg	rat	EPA OPPTS 870.1100 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	382 mg/kg	rat	other guideline:
Acetic acid, 2- phenylhydrazide 114-83-0	LD50	310 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
maleic acid 110-16-7	LD50	708 mg/kg	rat	not specified
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1- amide), Octadecanamide, 12-hydroxy-N-[2-[(1- oxooctadecyl)amino]ethyl] -----	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
1,4-Naphthalenedione 130-15-4	LD50	124 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylium chloride 3068-39-1	LD50	449 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
Decan-1-ol 112-30-1	LD50	> 5.000 mg/kg	rat	EPA OPPTS 870.1200 (Acute Dermal Toxicity)
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
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylium chloride 3068-39-1	LD50	2.500 mg/kg	rat	not specified

Acute inhalative toxicity:

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

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Decan-1-ol 112-30-1	Acute toxicity estimate (ATE)	5,1 mg/l	dust/mist			Expert judgement
Decan-1-ol 112-30-1	LC50	4 mg/l		2 h	mouse	
Cumene hydroperoxide 80-15-9	LC50	1,370 mg/l	vapour	4 h	rat	not specified
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1- amide), Octadecanamide, 12-hydroxy-N-[2-[(1- oxooctadecyl)amino]ethyl]-----	LC50	> 5,05 mg/l	dust/mist	4 h	rat	OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)
1,4-Naphthalenedione 130-15-4	LC50	0,046 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride 3068-39-1	LC50	> 0,05 - 0,5 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
Decan-1-ol 112-30-1	mildly irritating	4 h	rabbit	EPA OPPTS 870.2500 (Acute Dermal Irritation)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize 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)
maleic acid 110-16-7	irritating	24 h	human	Patch Test
1,4-Naphthalenedione 130-15-4	Category 1C (corrosive)		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride 3068-39-1	not irritating	4 h	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
Decan-1-ol 112-30-1	irritating		rabbit	EPA OPPTS 870.2400 (Acute Eye Irritation)
Acetic acid, 2- phenylhydrazide 114-83-0	not irritating		Chicken, eye, isolated	OECD Guideline 438 (Isolated Chicken Eye Test Method)
maleic acid 110-16-7	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride 3068-39-1	corrosive		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
Decan-1-ol 112-30-1	not sensitising	Buehler test	guinea pig	EPA OPPTS 870.2600 (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)
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)
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1- amide), Octadecanamide, 12-hydroxy-N-[2-[(1- oxooctadecyl)amino]ethyl]-----	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
1,4-Naphthalenedione 130-15-4	sensitising	not specified	guinea pig	not specified
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride 3068-39-1	Sub-Category 1B (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 CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Decan-1-ol 112-30-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		Henkel Method
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
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)
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)

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
Acetic acid, 2- phenylhydrazide 114-83-0	carcinogenic	oral: drinking water	continuous	mouse	male/female	not specified
maleic acid 110-16-7	not carcinogenic	oral: feed	2 y daily	rat	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)

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
Decan-1-ol 112-30-1	NOAEL 1.000 mg/kg	dermal	6 hours 5d/w over 13 consecutive weeks	rat	OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
maleic acid 110-16-7	NOAEL >= 40 mg/kg	oral: feed	90 d daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

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 CAS-No.	Value type	Value	Exposure time	Species	Method
Decan-1-ol 112-30-1	LC50	2,2 - 2,5 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Decan-1-ol 112-30-1	NOEC	0,26 mg/l	33 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage 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
Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-N-[2-[(1-oxooctadecyl)amino]ethyl]	LL50	Toxicity > Water solubility	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-N-[2-[(1-oxooctadecyl)amino]ethyl]	NOELR	Toxicity > Water solubility	32 d	Pimephales promelas	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)
3,6-bis(ethylamino)-9-[2-(methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride 3068-39-1	LC50	6,85 mg/l	96 h	Leuciscus idus	DIN 38412-15

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 CAS-No.	Value type	Value	Exposure time	Species	Method
Decan-1-ol 112-30-1	EC50	2,9 mg/l	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)
Acetic acid, 2-phenylhydrazide 114-83-0	EC50	1,1 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
maleic acid 110-16-7	EC50	42,81 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-	EL50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

N-[2-[(1-oxooctadecyl)amino]ethyl]-----					
1,4-Naphthalenedione 130-15-4	EC50	0,026 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3,6-bis(ethylamino)-9-[2-(methoxycarbonyl)phenyl]- 2,7-dimethylxanthylum chloride 3068-39-1	EC50	1 mg/l	48 h	Daphnia magna	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 CAS-No.	Value type	Value	Exposure time	Species	Method
Decan-1-ol 112-30-1	NOEC	0,11 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:
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy- N-[2-[(1-oxooctadecyl)amino]ethyl] -----	NOEC	Toxicity > Water solubility	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

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

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
Decan-1-ol 112-30-1	EC50	1,5 mg/l	72 h	Desmodesmus subspicatus	QSAR (Quantitative Structure Activity Relationship)
Decan-1-ol 112-30-1	EC10	0,7 mg/l	72 h	Desmodesmus subspicatus	QSAR (Quantitative Structure Activity Relationship)
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)
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)
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)
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy- N-[2-[(1- oxooctadecyl)amino]ethyl] -----	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy- N-[2-[(1- oxooctadecyl)amino]ethyl] -----	EC10	Toxicity > Water solubility	72 h	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)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]- 2,7-dimethylxanthylium chloride 3068-39-1	EC50	0,023 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]- 2,7-dimethylxanthylium chloride 3068-39-1	NOEC	0,014 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 CAS-No.	Value type	Value	Exposure time	Species	Method
Decan-1-ol 112-30-1	EC0	10.000 mg/l	30 min	Pseudomonas putida	DIN 38412, part 27 (Bacterial oxygen consumption 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)
1,4-Naphthalenedione 130-15-4	EC50	5,94 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]- 2,7-dimethylxanthylum chloride 3068-39-1	EC50	33 mg/l	3 h	activated sludge	OECD Guideline 209 (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
Decan-1-ol 112-30-1	readily biodegradable	aerobic	88 %	30 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)
Acetic acid, 2- phenylhydrazide 114-83-0	not readily biodegradable.	aerobic	39 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
maleic acid 110-16-7	readily biodegradable	aerobic	97,08 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy- N-[2-[(1- oxooctadecyl)amino]ethyl] -----	not readily biodegradable.	aerobic	22 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Reaction mass of N,N'- ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy- N-[2-[(1- oxooctadecyl)amino]ethyl] -----	not inherently biodegradable	aerobic	37 %	60 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
1,4-Naphthalenedione 130-15-4	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
3,6-bis(ethylamino)-9-[2- (methoxycarbonyl)phenyl]- 2,7-dimethylxanthylum chloride 3068-39-1	not readily biodegradable.	aerobic	2 - 5 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution 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
Decan-1-ol 112-30-1	20			calculated	QSAR (Quantitative Structure Activity Relationship)
Cumene hydroperoxide 80-15-9	9,1			calculation	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 CAS-No.	LogPow	Temperature	Method
Decan-1-ol 112-30-1	4,5	25 °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)
Acetic acid, 2-phenylhydrazide 114-83-0	0,74		QSAR (Quantitative Structure Activity Relationship)
maleic acid 110-16-7	-1,3	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-N-[2-[(1-oxooctadecyl)amino]ethyl]-----	5,86		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
1,4-Naphthalenedione 130-15-4	1,71		not specified
3,6-bis(ethylamino)-9-[2-(methoxycarbonyl)phenyl]-2,7-dimethylxanthylium chloride 3068-39-1	1,7	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask 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 CAS-No.	PBT / vPvB
Decan-1-ol 112-30-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Cumene hydroperoxide 80-15-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Acetic acid, 2-phenylhydrazide 114-83-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
maleic acid 110-16-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Reaction mass of N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), Octadecanamide, 12-hydroxy-N-[2-[(1-oxooctadecyl)amino]ethyl]-----	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
1,4-Naphthalenedione 130-15-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

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

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

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

Waste code

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

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

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

ADR	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
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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 2024/590):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	perfluorooctanoic acid CAS 335-67-1

VOC content (2010/75/EC)	< 3 %
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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.
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.
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.

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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