



Safety Data Sheet according to Regulation (EC) No1907/2006

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LOCTITE 243

SDS No. : 316211
V008.0

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

1.1. Product identifier

LOCTITE 243

Contains:

Maleic acid
Tetramethylene dimethacrylate

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
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.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 2
H411 Toxic to aquatic life with long lasting effects.	

Classification (DPD):

N - Dangerous for the environment
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Sensitizing
R43 May cause sensitisation by skin contact.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Warning
Hazard statement:	H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
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.

Label elements (DPD):

Xi - Irritant

N - Dangerous for the environment



Risk phrases:

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S24 Avoid contact with skin.

S37 Wear suitable gloves.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children.

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Maleic acid,

Tetramethylene dimethacrylate

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Anaerobic adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Tetramethylene dimethacrylate 2082-81-7	218-218-1 01-2119967415-30	>= 10- <= 30 %	Skin sensitizer 1B H317
2,4,6-Triallyloxy-s-triazine 101-37-1	202-936-7 01-2119489756-17	>= 2,5- < 10 %	Acute toxicity 4; Oral H302 Chronic hazards to the aquatic environment 2 H411
2-[[[2,2-bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	302-434-9 01-2119977121-41	>= 2,5- < 5 %	Serious eye irritation 2 H319 Chronic hazards to the aquatic environment 2 H411
Fatty acid amide~ 126098-16-6	484-050-2 01-0000020228-74	>= 0,25- < 2,5 %	Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410 M factor: 10 M factor (Chron Aquat Tox): 10
Cumene hydroperoxide 80-15-9	201-254-7	>= 0,1- < 1 %	Acute toxicity 4; Dermal H312 Specific target organ toxicity - repeated exposure 2 H373 Acute toxicity 4; Oral H302 Organic peroxides E H242 Acute toxicity 3; Inhalation H331 Skin corrosion 1B H314 Chronic hazards to the aquatic environment 2 H411
Acetic acid, 2-phenylhydrazide 114-83-0	204-055-3	>= 0,1- < 1 %	Acute toxicity 3; Oral H301 Acute toxicity 4; Dermal H312 Skin irritation 2; Dermal H315 Serious eye irritation 2 H319 Acute toxicity 4; Inhalation H332 Specific target organ toxicity - single exposure 3; Inhalation H335 Carcinogenicity 2 H351
Maleic acid 110-16-7	203-742-5 01-2119488705-25	>= 0,1- < 1 %	Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Skin irritation 2 H315 Skin sensitizer 1 H317 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335
1,4-Naphthalenedione 130-15-4	204-977-6	>= 0,01- < 0,1 %	Acute toxicity 3; Oral H301 Skin irritation 2; Dermal H315 Skin sensitizer 1; Dermal H317 Serious eye irritation 2 H319

			Acute toxicity 1; Inhalation H330 Specific target organ toxicity - single exposure 3; Inhalation H335 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410 M factor: 10
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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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Tetramethylene dimethacrylate 2082-81-7	218-218-1 01-2119967415-30	>= 10 - < 30 %	Xi - Irritant; R43
2,4,6-Triallyloxy-s-triazine 101-37-1	202-936-7 01-2119489756-17	>= 2,5 - < 10 %	Xn - Harmful; R22 N - Dangerous for the environment; R51/53
2-[[[2,2-bis[[[1-(oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	302-434-9 01-2119977121-41	>= 2,5 - < 5 %	N - Dangerous for the environment; R51/53
Fatty acid amide~ 126098-16-6	484-050-2 01-0000020228-74	>= 0,25 - < 2,5 %	N - Dangerous for the environment; R50/53
Cumene hydroperoxide 80-15-9	201-254-7	>= 0,1 - < 1 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 C - Corrosive; R34 O - Oxidizing; R7 N - Dangerous for the environment; R51/53
Maleic acid 110-16-7	203-742-5 01-2119488705-25	>= 0,1 - < 1 %	Xn - Harmful; R21/22 Xi - Irritant; R36/37/38, R43
Cumene 98-82-8	202-704-5	>= 0,1 - < 1 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 N - Dangerous for the environment; R51/53
1,4-Naphthalenedione 130-15-4	204-977-6	>= 0,01 - < 0,1 %	T+ - Very toxic; R25, R26 Xi - Irritant; R36/37/38, R43 N - Dangerous for the environment; R50/53

For full text of the R-Phrases indicated by codes 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.

Seek medical advice.

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

Seek medical advice.

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

SKIN: Rash, Urticaria.

Prolonged or repeated contact may cause eye irritation.

Prolonged or repeated contact may cause skin 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:

Carbon dioxide, foam, powder
Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

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 skin and eye contact.
Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

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.
Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

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	ppm	mg/m ³	Type	Category	Remarks
PROPANE-1,2-DIOL, PARTICULATES 57-55-6		10	Time Weighted Average (TWA):		EH40 WEL
PROPANE-1,2-DIOL, TOTAL VAPOUR AND PARTICULATES 57-55-6	150	474	Time Weighted Average (TWA):		EH40 WEL
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
CUMENE 98-82-8			Skin designation:	Can be absorbed through the skin.	EH40 WEL
CUMENE 98-82-8	25	125	Time Weighted Average (TWA):		EH40 WEL
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):	Indicative	ECTLV
CUMENE 98-82-8	20	100	Time Weighted Average (TWA):	Indicative	ECTLV

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
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					0,098 mg/kg	
2-[[2,2-Bis[[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	sediment (marine water)					0,0493 mg/kg	
2-[[2,2-Bis[[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	sediment (freshwater)					0,493 mg/kg	
2-[[2,2-Bis[[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	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	
Maleic acid 110-16-7	aqua (freshwater)					0,074 mg/L	
Maleic acid 110-16-7	aqua (intermittent releases)					0,744 mg/L	
Maleic acid 110-16-7	sediment (freshwater)					0,0624 mg/kg	
Maleic acid 110-16-7	STP					3,33 mg/L	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-[[2,2-Bis[[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Workers	Inhalation	Long term exposure - systemic effects		5,88 mg/m3	
2-[[2,2-Bis[[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Workers	Dermal	Long term exposure - systemic effects		1,67 mg/kg	
Maleic acid 110-16-7	Workers	Dermal	Acute/short term exposure - local effects		0,55 mg/cm2	
Maleic acid 110-16-7	Workers	Dermal	Long term exposure - local effects		0,04 mg/cm2	
Maleic acid 110-16-7	Workers	Dermal	Acute/short term exposure - systemic effects		58 mg/kg bw/day	
Maleic acid 110-16-7	Workers	Dermal	Long term exposure - systemic effects		3,3 mg/kg bw/day	

Biological Exposure Indices:

None

8.2. Exposure controls:

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

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:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	liquid blue
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	> 70 °C (> 158 °F)
Flash point	> 110 °C (> 230 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (25 °C (77 °F))	1,7 mbar
Vapour pressure (50 °C (122 °F))	< 300 mbar
Density (ρ)	1,08 g/cm ³
Density (ρ)	1,15 - 1,20 g/cm ³
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Insoluble
Solubility (qualitative) (Solvent: Acetone)	Soluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable

Evaporation rate
Vapor density
Oxidising properties

No data available / Not applicable
No data available / Not applicable
No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Peroxides.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if used according to specifications.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

May cause mild irritation to the eyes.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetramethylene dimethacrylate 2082-81-7	LD50	10.120 mg/kg	oral		rat	
2,4,6-Triallyloxy-s- triazine 101-37-1	LD50	753 mg/kg	oral		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	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
Maleic acid 110-16-7	LD50	708 mg/kg	oral		rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Maleic acid 110-16-7	LD50	1.560 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Serious eye damage/irritation:

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

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Tetramethylene dimethacrylate 2082-81-7	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components 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)
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	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)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Toxic to aquatic life with long lasting effects.
Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2,4,6-Triallyloxy-s-triazine 101-37-1	LC50	4,36 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,4,6-Triallyloxy-s-triazine 101-37-1	EC50	19,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation 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	Fish	96 h	Cyprinus carpio	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	EC50	> 10 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-[[2,2-bis[[[(1- oxoallyl)oxy)methyl]butoxy] methyl]-2-ethyl-1,3- propanediyl diacrylate 94108-97-1	EC50	> 12 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	< 0,35 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Fatty acid amide~ 126098-16-6	NOEC	> 0,024 mg/l	Fish	96 h	Cyprinus carpio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Fatty acid amide~ 126098-16-6	NOEC	> 0,024 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Fatty acid amide~ 126098-16-6	NOEC	0,0073 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	0,025 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Maleic acid 110-16-7	EC50	42,81 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,4-Naphthalenedione 130-15-4	EC50	0,011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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2,4,6-Triallyloxy-s-triazine 101-37-1		aerobic	7 - 9 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-[[[2,2-bis[[[(1-oxoallyloxy)methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1		aerobic	4 - 14 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Fatty acid amide~ 126098-16-6		aerobic	7 %	
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Maleic acid 110-16-7	readily biodegradable	aerobic	97,08 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
2,4,6-Triallyloxy-s-triazine 101-37-1	2,8				20 °C	
2-[[[2,2-bis[[[(1-oxoallyloxy)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		9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
Acetic acid, 2-phenylhydrazide 114-83-0	0,74					
Maleic acid 110-16-7	-1,3				20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
1,4-Naphthalenedione 130-15-4	1,71					

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Tetramethylene dimethacrylate 2082-81-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2,4,6-Triallyloxy-s-triazine 101-37-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2-[[[2,2-bis[[[(1-oxoallyloxy)methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	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.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

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.

Disposal must be made according to official regulations.

Waste code

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

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

ADR	3082
RID	3082
ADNR	3082
IMDG	3082
IATA	3082

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acid amide)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acid amide)
ADNR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acid amide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acid amide)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Fatty acid amide)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADNR	9
IMDG	9
IATA	9

14.4. Packaging group

ADR	III
RID	III
ADNR	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
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	Tunnelcode: (E)
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content 0,0 %
(VOCV 814.018 VOC regulation
CH)

VOC content < 3 %
(1999/13/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:

- R10 Flammable.
- R21/22 Harmful in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R23 Toxic by inhalation.
- R25 Toxic if swallowed.
- R26 Very toxic by inhalation.
- R34 Causes burns.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R37 Irritating to respiratory system.
- R43 May cause sensitisation by skin contact.
- R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R7 May cause fire.
- 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.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H331 Toxic 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.

Further information:

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.