

Safety Data Sheet

according to Regulation (EC) No 1907/2006

DUO GLOSSY TOP

Revision date: 11.12.2018

Product code:GG DUO

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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

Professional use.
Nail polish and gels

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: UNIQUE NAILS - ANGELINA IOSIFIDOU
Street: 15, Agathoupoleos St.
Place: 112 52, ATHENS, GREECE
Telephone: +30 210 8656070
e-mail: info@unique-cosmetics.com
Internet: www.unique-cosmetics.com
Responsible Department: Mr Andreas Chaikalis
+30 6936 040550

1.4. Emergency telephone number:**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Reproductive toxicity: Repr. 2
Hazardous to the aquatic environment: Aquatic Acute 1
Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

pentaerythritol tetrakis(3-mercaptopropionate)
2-hydroxyethyl methacrylate
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
1,2-ethanediyl diacrylate
Dibutyltin dilaurate

Signal word: Warning

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Pictograms:



Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to local/regional/national/international regulations.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
	acrylic resin			50 - < 55 %
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
94108-97-1	2-[[[2,2-bis[[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate			20 - < 25 %
	302-434-9		01-2119977121-41	
	Eye Irrit. 2, Aquatic Chronic 2; H319 H411			
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)			10 - < 15 %
	231-472-8			
	Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H302 H317 H400 H410			
868-77-9	2-hydroxyethyl methacrylate			5 - < 10 %
	212-782-2	607-124-00-X		
	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H319 H315 H317			
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			1 - < 5 %
	278-355-8	015-203-00-X	01-2119972295-29	
	Repr. 2, Skin Sens. 1B, Aquatic Chronic 2; H361f H317 H411			
2274-11-5	1,2-ethanediyl diacrylate			< 1 %
	218-886-4			
	Acute Tox. 3, Acute Tox. 3, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1; H311 H301 H315 H318 H317			
77-58-7	Dibutyltin dilaurate			< 1 %

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	201-039-8		01-2119496068-27	
	Muta. 2, Repr. 1B, Acute Tox. 4, Skin Corr. 1C, Skin Sens. 1, STOT SE 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H341 H360 H302 H314 H317 H370 H372 H400 H410			

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Sand. Foam. Carbon dioxide (CO₂). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO₂)

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment (refer to section 8).

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6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil. If required, notify relevant authorities according to all applicable regulations.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Recommended storage temperature: 20°C

Protect against: Light. UV-radiation/sunlight. heat. moisture.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Tin compounds, organic, except Cyhexatin (ISO), (as Sn)	-	0.1		TWA (8 h)	WEL
		-	0.2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type	Exposure route		Effect	Value
94108-97-1	2-[[2,2-bis[[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate			
Worker DNEL, long-term		inhalation	systemic	5,88 mg/m ³

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Worker DNEL, long-term	dermal	systemic	1,67 mg/kg bw/day
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		
Worker DNEL, long-term	dermal	systemic	1 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	3,5 mg/m³
77-58-7	Dibutyltin dilaurate		
Worker DNEL, acute	dermal	systemic	2,08 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,005 mg/m³
Consumer DNEL, acute	inhalation	systemic	0,04 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,16 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,003 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,02 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	0,43 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	0,02 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
94108-97-1	2-[[[2,2-bis[[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl] diacrylate	
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0,012 mg/l
Marine water		0 mg/l
Freshwater sediment		0,484 mg/kg
Marine sediment		0,048 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,096 mg/kg
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	
Freshwater		0,004 mg/l
Freshwater (intermittent releases)		0,035 mg/l
Marine water		0 mg/l
Freshwater sediment		0,29 mg/kg
Marine sediment		0,029 mg/kg
Soil		0,056 mg/kg
77-58-7	Dibutyltin dilaurate	
Freshwater		0 mg/l
Freshwater (intermittent releases)		0,005 mg/l
Marine water		0 mg/l
Freshwater sediment		0,05 mg/kg
Marine sediment		0,005 mg/kg
Secondary poisoning		0,2 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l

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Soil	0,0407 mg/kg
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8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. After work, wash hands and face. Wash contaminated clothing prior to re-use. Street clothing should be stored separately from work clothing.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). DIN EN 166

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-exceeding exposure limit values

-insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

No information available.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	light blue	
Odour:	characteristic	
pH-Value:		No information available.

Changes in the physical state

Melting point:	No information available.
Initial boiling point and boiling range:	No information available.
Sublimation point:	No information available.
Softening point:	No information available.
Pour point:	No information available.
Flash point:	No information available.
Sustaining combustion:	No data available

Flammability

Solid:	No information available.
Gas:	No information available.

Explosive properties

none

Lower explosion limits:	No information available.
Upper explosion limits:	No information available.
Ignition temperature:	No information available.

Auto-ignition temperature

Solid:	No information available.
Gas:	No information available.

Decomposition temperature:	No information available.
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Oxidizing properties

none

Vapour pressure: (at 20 °C)	No information available.
Vapour pressure: (at 50 °C)	No information available.

Density (at 20 °C):	1,1 g/cm ³
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Bulk density:	No information available.
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Water solubility:	No information available.
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Solubility in other solvents

No information available.

Partition coefficient:	No information available.
Viscosity / dynamic:	No information available.
Viscosity / kinematic:	No information available.
Flow time:	No information available.
Vapour density:	No information available.
Evaporation rate:	No information available.
Solvent separation test:	No information available.

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Solvent content:

No information available.

9.2. Other information

Solid content:

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat. Do not store at temperatures over: 60°C

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. strong alkalis. Do not mix with peroxid-accelerators or reduction agents. Strong acid

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
94108-97-1	2-[[2,2-bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate				
	oral	LD50 > 5000 mg/kg	Rat	REACH Dossier	OECD Guideline 401
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)				
	oral	LD50 > 1000 - < 2000 mg/kg	Rat	REACH Dossier	OECD Guideline 423
	inhalation (4 h) aerosol	LC50 [>3,36] mg/l	Rat.	REACH Dossier	OECD 403
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 >5000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit.	ECHA Dossier	
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide				
	oral	LD50 > 5000 mg/kg	Rat	REACH Dossier	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	REACH Dossier	OECD Guideline 401
2274-11-5	1,2-ethanediyl diacrylate				

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	oral	ATE mg/kg	100			
	dermal	ATE mg/kg	300			
77-58-7	Dibutyltin dilaurate					
	oral	LD50 mg/kg	2071	Rat	REACH Dossier	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	REACH Dossier	OECD Guideline 402

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (pentaerythritol tetrakis(3-mercaptopropionate); 2-hydroxyethyl methacrylate; Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide; 1,2-ethanediyl diacrylate; Dibutyltin dilaurate)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

pentaerythritol tetrakis(3-mercaptopropionate):

In vitro mutagenicity/genotoxicity: Method: OECD 471 (Ames test). Result / evaluation: negative.; Reproductive

toxicity: Method: OECD 408 Species: Rat. Exposure duration: 90 d. Result: NOAEL= 50 mg/kg bw/day. ;

Developmental toxicity/teratogenicity: Method: OECD 414. Species: Rat. Result: NOEL = 120 mg/kg bw/day

2-hydroxyethyl methacrylate:

In-vitro mutagenicity: Method: OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation

Assay); Result: negative. Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD

Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of

GL 422); Species: Rat; Result: NOAEL >= 1000 mg/kg; Literature information: ECHA Dossier

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide:

In vitro mutagenicity/genotoxicity: Method: OECD 471 (Ames test). Result / evaluation: negative.;

Developmental toxicity/teratogenicity: Method: OECD 414. Species: Rat. Result: NOAEL = 150 mg/kg bw/day

Literature information: ECHA Dossier.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

pentaerythritol tetrakis(3-mercaptopropionate): Subchronic oral toxicity: Method: OECD 408 Species: Rat.

Exposure duration: 90 d. Result: NOAEL= 50 mg/kg bw/day.

2-hydroxyethyl methacrylate:

Subchronic oral toxicity: Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the

Reproduction / Developmental Toxicity Screening Test); Species: Rat; Results: NOAEL = 30 mg/kg; Literature

information: ECHA Dossier

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide:

Subacute oral toxicity: Method: Japanese Ministry of Health and Welfare (M.H.W.) guidelines 1986 for a

twenty-eight day repeat dose oral toxicity study. Exposure duration: 28 d. Species: Rat. Result / evaluation:

NOAEL = 50 mg/kg bw/day Literature information: ECHA Dossier.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity**

The product has not been tested.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
94108-97-1	2-[[2,2-bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate					
	Acute fish toxicity	LC50 1,2 mg/l	96 h	Cyprinus carpio	REACH Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 1,3 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 10 mg/l	48 h	Daphnia magna	REACH Dossier	OECD Guideline 202
	Acute bacteria toxicity	(> 1000 mg/l)	3 h	activated sludge of a predominantly domestic sewage	REACH Dossier	OECD Guideline 209
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)					
	Acute fish toxicity	LC50 0,034 mg/l	96 h	Oncorhynchus mykiss	REACH Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 > 0,12 mg/l	72 h	Desmodesmus subspicatus	REACH Dossier	OECD 201
	Acute crustacea toxicity	EC50 > 0,35 mg/l	48 h	Daphnia magna	REACH Dossier	OECD Guideline 202
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50 227 mg/l	96 h	Pimephales promelas	ECHA Dossier	
	Acute algae toxicity	ErC50 836 mg/l	72 h	Selenastrum capricornutum	ECHA Dossier	
	Acute crustacea toxicity	EC50 380 mg/l	48 h	Daphnia magna	ECHA Dossier	
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide					
	Acute fish toxicity	LC50 6,53 mg/l	96 h	Oryzias latipes	REACH Dossier	
	Acute algae toxicity	ErC50 > 2,01 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 3,53 mg/l	48 h	Daphnia magna	REACH Dossier	OECD Guideline 202
77-58-7	Dibutyltin dilaurate					
	Acute algae toxicity	ErC50 > 1 mg/l	72 h	Desmodesmus subspicatus	REACH Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 1,7 - 3,4 mg/l	48 h	Daphnia magna	REACH Dossier	OECD Guideline 202
	Acute bacteria toxicity	(> 1000 mg/l)	3 h	activated sludge of a predominantly domestic sewage	REACH Dossier	OECD Guideline 209

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
94108-97-1	2-[[2,2-bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate			
	OECD Guideline 301 B	4%	29	REACH Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)			
	OECD Guideline 301 B	26%	28	REACH Dossier
	Not readily biodegradable (according to OECD criteria)			
868-77-9	2-hydroxyethyl methacrylate			

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	OECD 301C / ISO 9408 / EWG 92/69 Anhang V, C.4-F	>92%	14	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			
	activated sludge	0,1	28	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)			
77-58-7	Dibutyltin dilaurate			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	23%	39	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
94108-97-1	2-[[[2,2-bis[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate	4,14
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)	ca. 3,03
868-77-9	2-hydroxyethyl methacrylate	0,47
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	3,1
77-58-7	Dibutyltin dilaurate	4,44

BCF

CAS No	Chemical name	BCF	Species	Source
7575-23-7	pentaerythritol tetrakis(3-mercaptopropionate)	23,7	calculation	Estimation Programs
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	18 - 22	Cyprinus carpio	Study report (1989)
77-58-7	Dibutyltin dilaurate	1,49	Carassius carassius	Toxicol. Environ. Ch

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

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080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(pentaerythritol tetrakis(3-mercaptopropionate))

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

-

Inland waterways transport (ADN)**14.1. UN number:**

UN 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(pentaerythritol tetrakis(3-mercaptopropionate))

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

Marine transport (IMDG)**14.1. UN number:**

UN 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(pentaerythritol tetrakis(3-mercaptopropionate))

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14.3. Transport hazard class(es):

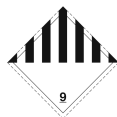
9

14.4. Packing group:

III

Hazard label:

9



Marine pollutant:

Yes

Special Provisions:

274, 335, 969

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-F

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:**

UN 3082

14.2. UN proper shipping name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(pentaerythritol tetrakis(3-mercaptopropionate))**14.3. Transport hazard class(es):**

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A197

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:

964

IATA-max. quantity - Passenger:

450 L

IATA-packing instructions - Cargo:

964

IATA-max. quantity - Cargo:

450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

yes



Danger releasing substance:

pentaerythritol tetrakis(3-mercaptopropionate)

14.6. Special precautions for user

Safe handling: see section 7

Personal protection equipment: see section 8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 30: Dibutyltin dilaurate

2010/75/EU (VOC):

not determined

2004/42/EC (VOC):

not determined

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Information according to 2012/18/EU
(SEVESO III):

E2 Hazardous to the Aquatic Environment

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

3 - highly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

2-[[2,2-bis[[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Dibutyltin dilaurate

SECTION 16: Other information

Changes

Rev. 1.0; Initial release: 11.12.2018

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern

TRGS Technische Regeln fuerGefahrstoffe

TSCA: Toxic Substances Control Act

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

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WGK: Wassergefährdungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Repr. 2; H361f	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic 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.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H372	Causes 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

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)