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

1.1. Product identifier

Kisling - 1678-1 - component A 1680-1

UFI: QARY-EF4C-5008-U6TG

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

Use of the substance/mixture

Adhesives and sealants

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	Kisling AG		
Street:	Motorenstrasse 102		
Place:	CH-8620 Wetzikon		
Telephone:	+41 58 272 0 272		
E-mail:	customerservice@kisling.com		
Contact person:	Product Compliance	Telephone:	+49 7940 5096 143
E-mail:	compliance@kisling.com		
Internet:	www.kisling.com		

Supplier

Company name:	Kisling (Deutschland) GmbH		
Street:	Salzstraße 15		
Place:	D-74676 Niedernhall		
Telephone:	+49 7940 50961 61		
E-mail:	customerservice@kisling.com		
Contact person:	Product Compliance	Telephone:	+49 7940 5096 143
E-mail:	compliance@kisling.com		
Internet:	www.kisling.com		

1.4. Emergency telephone number:

24 hr. emergency phone number +1 872 5888271 (KAR)
Medicines & Poisons Info Office +356 2545 6508

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute Tox. 4; H332
Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Benzyl methacrylate
Cyclohexyl methacrylate
methacrylic acid; 2-methylpropenoic acid
Propylidynetrimethanol, ethoxylated, esters with acrylic acid
Bis(methacryloyloxyethyl) hydrogen phosphate
@000000000779
2-hydroxyethyl methacrylate
tributylamine

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statements

P261	Avoid breathing Vapour.
P280	Wear protective gloves and eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H317-H318

Precautionary statements

P261-P280-P305+P351+P338-P310-P333+P313-P362+P364

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances listed below with nonhazardous components.

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
2495-37-6	Benzyl methacrylate			30 - < 50 %
	219-674-4			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H315 H319 H317 H335			
101-43-9	Cyclohexyl methacrylate			15 - < 30 %
	202-943-5			
	Skin Sens. 1, STOT SE 3; H317 H335			
79-41-4	methacrylic acid; 2-methylpropenoic acid			1 - < 5 %
	201-204-4	607-088-00-5	01-2119463884-26	
	Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1, STOT SE 3; H311 H332 H302 H314 H318 H335			
25852-47-5	Polyethylene glycol dimethacrylate			1 - < 5 %
	Aquatic Chronic 3; H412			
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid			1 - < 5 %
	500-066-5		01-2119489900-30	
	Eye Irrit. 2, Skin Sens. 1B, Aquatic Chronic 3; H319 H317 H412			
32435-46-4	Bis(methacryloyloxyethyl) hydrogen phosphate			1 - < 5 %
	251-040-2			
	Eye Dam. 1, Skin Sens. 1B; H318 H317			
103-50-4	Dibenzyl ether			0.1 - < 1 %
	203-118-2		01-2119782240-44	
	Skin Sens. 1B, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410			
103671-44-9	N,N-bis-(2-hydroxyethyl)-para-toluidine			0.1 - < 1 %
	911-490-9		01-2119979579-10	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H302 H315 H318 H317 H412			
868-77-9	2-hydroxyethyl methacrylate			0.1 - < 1 %
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
91-66-7	N,N-diethylaniline			0.1 - < 1 %
	202-088-8	612-054-00-8	01-2119943758-22	
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 2; H331 H311 H301 H373 H411			
102-82-9	tributylamine			0.1 - < 1 %
	203-058-7			
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2; H330 H310 H302 H315			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
2495-37-6	219-674-4	Benzyl methacrylate	30 - < 50 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3980 mg/kg		
101-43-9	202-943-5	Cyclohexyl methacrylate	15 - < 30 %
	inhalation: LC50 = 29.8 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 12900 mg/kg		
79-41-4	201-204-4	methacrylic acid; 2-methylpropenoic acid	1 - < 5 %
	inhalation: LC50 = 7,1 mg/l (vapours); inhalation: ATE = 1.5 mg/l (dusts or mists); dermal: LD50 = 500 mg/kg; oral: LD50 = 1320 mg/kg Eye Dam. 1; H318: >= 3 - 100 Eye Irrit. 2; H319: >= - < 3 STOT SE 3; H335: >= 1 - 100		
28961-43-5	500-066-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	1 - < 5 %
	dermal: LD50 = > 13200 mg/kg; oral: LD50 = > 2000 mg/kg		
103-50-4	203-118-2	Dibenzyl ether	0.1 - < 1 %
	oral: LD50 = 4807 mg/kg		
103671-44-9	911-490-9	N,N-bis-(2-hydroxyethyl)-para-toluidine	0.1 - < 1 %
	oral: ATE = 500 mg/kg		
868-77-9	212-782-2	2-hydroxyethyl methacrylate	0.1 - < 1 %
	oral: LD50 = 5050 mg/kg		
91-66-7	202-088-8	N,N-diethylaniline	0.1 - < 1 %
	inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0.5 mg/l (dusts or mists); dermal: LD50 = > 400 mg/kg; oral: ATE = 100 mg/kg		
102-82-9	203-058-7	tributylamine	0.1 - < 1 %
	inhalation: LC50 = 0,5 mg/l (vapours); inhalation: ATE = 0.005 mg/l (dusts or mists); dermal: LD50 = 195 mg/kg; oral: LD50 = 420 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No special measures are necessary.

After inhalation

Provide fresh air.

After contact with skin

Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. IF SWALLOWED: Immediately call a doctor.

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

Irritant — skin irritation and eye damage

May cause respiratory irritation. Dyspnoea.

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

alcohol resistant foam, Carbon dioxide (CO_2), Dry extinguishing powder

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products, Flammable vapours can accumulate in steam space of closed systems.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. Evacuate area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment. See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers). Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

For cleaning up

Soak up inert absorbent and dispose as waste requiring special attention.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothes. People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Further information on handling

Keep only in the original container in a cool, well-ventilated place.
Never use pressure to empty container. Do not allow to enter into surface water or drains.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
2495-37-6	Benzyl methacrylate			
Worker DNEL, long-term		inhalation	systemic	24,2 mg/m³
Worker DNEL, long-term		dermal	systemic	6,94 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	7,2 mg/m³
Consumer DNEL, long-term		dermal	systemic	4,17 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4,17 mg/kg bw/day
101-43-9	Cyclohexyl methacrylate			
Worker DNEL, long-term		inhalation	systemic	14.81 mg/m³
Worker DNEL, long-term		dermal	systemic	4.2 mg/kg bw/day
79-41-4	methacrylic acid; 2-methylpropenoic acid			
Worker DNEL, long-term		inhalation	systemic	39,3 mg/m³
Worker DNEL, long-term		inhalation	local	44 mg/m³
Worker DNEL, long-term		dermal	systemic	4,25 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,38 mg/cm²
Consumer DNEL, long-term		inhalation	systemic	11,7 mg/m³
Consumer DNEL, long-term		inhalation	local	8,8 mg/m³
Consumer DNEL, long-term		dermal	systemic	5,35 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,23 mg/cm²
Consumer DNEL, long-term		oral	systemic	5,35 mg/kg bw/day
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid			
Worker DNEL, long-term		inhalation	systemic	37 mg/m³
Worker DNEL, long-term		dermal	systemic	10,5 mg/kg bw/day
103-50-4	Dibenzyl ether			
Worker DNEL, long-term		inhalation	systemic	43.7 mg/m³
Worker DNEL, long-term		dermal	systemic	6.2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	10.8 mg/m³
Consumer DNEL, long-term		dermal	systemic	3.1 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	3.1 mg/kg bw/day
91-66-7	N,N-diethylaniline			
Worker DNEL, long-term		dermal	systemic	7 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,0167 mg/kg bw/day
102-82-9	tributylamine			
Worker DNEL, long-term		inhalation	systemic	5,3 mg/m³

Worker DNEL, acute	inhalation	systemic	10,6 mg/m³
Worker DNEL, long-term	inhalation	local	15,2 mg/m³
Worker DNEL, acute	inhalation	local	15,2 mg/m³

PNEC values

CAS No	Name of agent	
Environmental compartment		Value
2495-37-6	Benzyl methacrylate	
Freshwater		0,01 mg/l
Freshwater (intermittent releases)		0,005 mg/l
Marine water		0,001 mg/l
Freshwater sediment		0,423 mg/kg
Marine sediment		0,042 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,33 mg/l
Soil		0,079 mg/kg
101-43-9	Cyclohexyl methacrylate	
Freshwater		0.013 mg/l
Freshwater (intermittent releases)		0.13 mg/l
Marine water		0.001 mg/l
Freshwater sediment		0.28 mg/kg
Marine sediment		0.028 mg/kg
Micro-organisms in sewage treatment plants (STP)		9 mg/l
Soil		0.048 mg/kg
79-41-4	methacrylic acid; 2-methylpropenoic acid	
Freshwater		0,82 mg/l
Freshwater (intermittent releases)		0,45 mg/l
Marine water		0,082 mg/l
Freshwater sediment		3,09 mg/kg
Marine sediment		0,309 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,137 mg/kg
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	
Freshwater		0,002 mg/l
Freshwater (intermittent releases)		0,019 mg/l
Marine water		0 mg/l
Freshwater sediment		0,038 mg/kg
Marine sediment		0,004 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,006 mg/kg
103-50-4	Dibenzyl ether	
Freshwater		0.002 mg/l
Freshwater (intermittent releases)		0.008 mg/l
Marine water		0 mg/l
Freshwater sediment		0.12 mg/kg
Marine sediment		0.012 mg/kg
Micro-organisms in sewage treatment plants (STP)		1.38 mg/l
Soil		0.023 mg/kg

91-66-7	N,N-diethylaniline
Freshwater	0,00936 mg/l
Freshwater (intermittent releases)	0,0742 mg/l
Marine water	0,000936 mg/l
Freshwater sediment	2,52 mg/kg
Marine sediment	0,252 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,018 mg/l
Soil	0,498 mg/kg
102-82-9	tributylamine
Freshwater	0,008 mg/l
Freshwater (intermittent releases)	0,08 mg/l
Marine water	0,0008 mg/l
Freshwater sediment	35,85 mg/kg
Marine sediment	3,59 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	7,17 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.
Breakthrough times and swelling properties of the material must be taken into consideration.
NBR (Nitrile rubber) 0,4 mm, Breakthrough time: 480 min
EN ISO 374

Skin protection

Avoid contact with skin, eyes and clothes.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste, solid
Colour:	cream
Odour:	characteristic

Odour threshold: not determined

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	> 93 °C	
Flammability:	not determined	not applicable
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	>60 °C	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value:	not determined	
Viscosity / kinematic:	not determined	
Water solubility:	practically insoluble	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	1.04 g/cm³
Relative density:	not determined
Relative vapour density:	not determined
Particle characteristics:	Polymer preparations and compounds Particle size < 5 mm

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

not determined

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined
Viscosity / dynamic:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Thermal decomposition can lead to the escape of irritating gases and vapours.

Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

No data available

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) 2.283 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2495-37-6	Benzyl methacrylate				
	oral	LD50 3980 mg/kg	Rat	Study report (1984)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2011)	EU Method B.3
101-43-9	Cyclohexyl methacrylate				
	oral	LD50 12900 mg/kg	Rat	Study report (1978)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2010)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 29.8 mg/l	Rat	J. Dent. Res. 59: 1074 (1980)	Study to assess the acute inhalative tox
79-41-4	methacrylic acid; 2-methylpropenoic acid				
	oral	LD50 1320 mg/kg	Rat	Study report (1977)	OECD Guideline 401
	dermal	LD50 500 mg/kg	Rabbit	Pre-supplier/manufacturer	
	inhalation (4 h) vapour	LC50 7,1 mg/l	Rat	Pre-supplier/manufacturer	OECD 403
	inhalation dust/mist	ATE 1.5 mg/l			
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid				
	oral	LD50 > 2000 mg/kg	Rat	Study report (1998)	OECD Guideline 401
	dermal	LD50 > 13200 mg/kg	Rabbit	Study report (1984)	An acute dermal toxicity study was perfo
103-50-4	Dibenzyl ether				
	oral	LD50 4807 mg/kg	Rat	Study report (1976)	Ten male rats received a single oral app
103671-44-9	N,N-bis-(2-hydroxyethyl)-para-toluidine				
	oral	ATE 500 mg/kg			
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 5050 mg/kg	Rat		
91-66-7	N,N-diethylaniline				
	oral	ATE 100 mg/kg			
	dermal	LD50 > 400 mg/kg	Rabbit	ChemIDplus (2018)	other: As mentioned below
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0.5 mg/l			
102-82-9	tributylamine				

	oral	LD50 mg/kg	420	Rat	Publication (1974)	Method: acute oral toxicity test Screeni
	dermal	LD50 mg/kg	195	Rabbit	Publication (1974)	Method: acute dermal toxicity Screening
	inhalation (4 h) vapour	LC50	0,5 mg/l	Rat	Study report (1987)	OECD Guideline 403
	inhalation dust/mist	ATE mg/l	0.005			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Benzyl methacrylate; Cyclohexyl methacrylate; Propylidynetrimethanol, ethoxylated, esters with acrylic acid; Bis(methacryloyloxyethyl) hydrogen phosphate; Dibenzyl ether; N,N-bis-(2-hydroxyethyl)-para-toluidine; 2-hydroxyethyl methacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

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

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

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

STOT-single exposure

May cause respiratory irritation. (Benzyl methacrylate; methacrylic acid; 2-methylpropenoic acid)

STOT-repeated exposure

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

Aspiration hazard

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

Information on likely routes of exposure

No data available

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

May be harmful if swallowed, in contact with skin or if inhaled.

11.2. Information on other hazards

Other information

No data available

Further information

No data available

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
2495-37-6	Benzyl methacrylate						
	Acute fish toxicity	LC50	4,67 mg/l	96 h	Pimephales promelas	REACh Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50	2,28 mg/l	72 h	Desmodesmus subspicatus	REACh Registration Dossier	OECD Guideline 201
	Crustacea toxicity	NOEC	4,21 mg/l	21 d	Daphnia magna	REACh Registration Dossier	OECD Guideline 211
101-43-9	Cyclohexyl methacrylate						
	Acute fish toxicity	LC50	590 mg/l	96 h	Danio rerio	Study report (2001)	OECD Guideline 203
	Acute algae toxicity	ErC50	12.5 mg/l	72 h	Raphidocelis subcapitata	Study report (2010)	OECD Guideline 201
	Acute crustacea toxicity	EC50	33.9 mg/l	48 h	Daphnia magna	Study report (2004)	OECD Guideline 202
	Fish toxicity	NOEC	9.4 mg/l	35 d	Danio rerio	Study report (2002)	OECD Guideline 210
	Crustacea toxicity	NOEC	37 mg/l	21 d	Daphnia magna	European Union - Risk Assessment Report,	OECD Guideline 211
	Acute bacteria toxicity	EC50 ( )	900 mg/l		activated sludge, domestic	Study report (2004)	OECD Guideline 209
79-41-4	methacrylic acid; 2-methylpropenoic acid						
	Acute fish toxicity	LC50	85 mg/l	96 h	Oncorhynchus mykiss	REACh Registration Dossier	EPA OTS 797.1400
	Acute algae toxicity	ErC50	45 mg/l	72 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	> 130 mg/l	48 h	Daphnia magna	REACh Registration Dossier	EPA OTS 797.1300
	Fish toxicity	NOEC	10 mg/l	35 d	Danio rerio	REACh Registration Dossier	OECD Guideline 210
	Crustacea toxicity	NOEC	53 mg/l	21 d	Daphnia magna	REACh Registration Dossier	OECD Guideline 211
	Acute bacteria toxicity	EC50 mg/l ( )	13500	3 h	Activated sludge	Publication (2008)	ISO 8192
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid						
	Acute fish toxicity	LC50	1,95 mg/l	96 h	Danio rerio	REACh Registration Dossier	OECD Guideline 203

	Acute algae toxicity	ErC50	2,2 mg/l	72 h	Desmodesmus subspicatus	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	70,7	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202
103-50-4	Dibenzyl ether						
	Acute fish toxicity	LC50	6.8 mg/l	96 h	Oryzias latipes	Study report (1996)	OECD Guideline 203
	Acute crustacea toxicity	EC50 mg/l	0.77	48 h	Daphnia magna	Study report (1996)	OECD Guideline 202
	Acute bacteria toxicity	EC50 ( )	138 mg/l		Activated sludge	Study report (1996)	other: Official Journal of the European
868-77-9	2-hydroxyethyl methacrylate						
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas		
91-66-7	N,N-diethylaniline						
	Acute fish toxicity	LC50 mg/l	42,25	96 h	Danio rerio	REACh Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	7,42	72 h	Desmodesmus subspicatus	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	35,2	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC mg/l	0,936	21 d	Daphnia magna	REACh Registration Dossier	other: modelling data
102-82-9	tributylamine						
	Acute fish toxicity	LC50 mg/l	16,3	96 h	Oryzias latipes	Study report (2000)	other: Testing Methods for Industrial Wa
	Acute algae toxicity	ErC50 mg/l	10,1	72 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	8 mg/l	48 h	Daphnia magna (Big water flea)	Pre-supplier/manufacturer	OECD 202

12.2. Persistence and degradability

No data available

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
102-82-9	tributylamine			
	OECD 301B	88 %	28	Pre-supplier/manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2495-37-6	Benzyl methacrylate	3,1
101-43-9	Cyclohexyl methacrylate	3.9
79-41-4	methacrylic acid; 2-methylpropenoic acid	0,93
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	2,89
103-50-4	Dibenzyl ether	3.31
868-77-9	2-hydroxyethyl methacrylate	0,47
91-66-7	N,N-diethylaniline	3,904
102-82-9	tributylamine	3,338

BCF

CAS No	Chemical name	BCF	Species	Source
101-43-9	Cyclohexyl methacrylate	54	fish	United States Enviro
103-50-4	Dibenzyl ether	>= 171	Cyprinus carpio	Study report (2009)
91-66-7	N,N-diethylaniline	>= 44 - = 17	Cyprinus carpio	REACh Registration D
102-82-9	tributylamine	7,3	Cyprinus carpio	REACh Registration D

12.4. Mobility in soil

No data 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. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

080410 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 other than those mentioned in 08 04 09

List of Wastes Code - used product

080410 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 other than those mentioned in 08 04 09

List of Wastes Code - contaminated packaging

080410 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 other than those mentioned in 08 04 09

Contaminated packaging

Completely emptied packages can be recycled. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

Directive 2010/75/EU on industrial emissions:	23.079 % (240.019 g/l)
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles 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 hazard class (D):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Skin Sens: Skin sensitisation
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

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

Classification	Classification procedure
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
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.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.

Further Information

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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)