SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830



ANCHOR A

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

1.1. Product identifier

: ANCHOR A Product name

Registration number REACH : Not applicable (mixture)

Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Resin

1.2.2 Uses advised against

No uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

TEC7*

Industrielaan 5B

B-2250 Olen

2 +32 14 85 97 37

4 +32 14 85 97 38

info@tec7.be

*TEC7 is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.

Industrielaan 5B

B-2250 Olen

2 +32 14 85 97 37

4 +32 14 85 97 38

info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	zard statements			
Skin Sens.	category 1	H317: May cause an allergic skin reaction.			
STOT SE	category 3	H335: May cause respiratory irritation.			

2.2. Label elements



Contains: ethylene dimethacrylate; hydroxypropyl methacrylate.

Signal word	Warning
signai word	warning

H-statements

May cause an allergic skin reaction. H317 May cause respiratory irritation. H335

P-statements

P101 If medical advice is needed, have product container or label at hand.

Keep out of reach of children. P102

P280 Wear protective gloves, protective clothing and eye protection/face protection.

Use only outdoors or in a well-ventilated area. P271

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell. P312

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Store locked up. P405

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be

© BIG vzw

Reason for revision: 3 Revision number: 0502 Publication date: 2008-12-01 Date of revision: 2019-08-12

Product number: 45230

P501

Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
ethylene dimethacrylate 01-2119965172-38	97-90-5 202-617-2	10%≤C<15%	Skin Sens. 1; H317 STOT SE 3; H335	(1)(8)(10)	Constituent
hydroxypropyl methacrylate 01-2119490226-37	27813-02-1 248-666-3	1% <c<10%< td=""><td>Skin Sens. 1; H317 Eye Irrit. 2; H319</td><td>(1)(10)</td><td>Constituent</td></c<10%<>	Skin Sens. 1; H317 Eye Irrit. 2; H319	(1)(10)	Constituent
Quartz (SiO2)	14808-60-7 238-878-4	1%≤C<5 %	STOT RE 1; H372	(5)(1)(2)	Constituent
1,1'-(p-tolylimino)dipropan-2-ol 01-2119980937-17	38668-48-3 254-075-1	C<1%	Acute Tox. 2; H300 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	(1)	Constituent
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate 01-2119451093-47	6846-50-0 229-934-9	C<1%	Repr. 2; H361 Aquatic Chronic 3; H412	(1)(10)	Constituent

- (1) For H-statements in full: see heading 16
- (2) Substance with a Community workplace exposure limit
- (5) This component is physically bound in the product
- (8) Specific concentration limits, see heading 16
- (10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Do not apply (chemical) neutralizing agents without medical advice. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not apply (chemical) neutralizing agents without medical advice. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

Irritation of the respiratory tract.

After skin contact:

No effects known.

After eye contact:

No effects known. **After ingestion:**

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

 Revision number: 0502
 Product number: 45230
 2 / 16

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Safety glasses. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Safety glasses. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product.

6.3. Methods and material for containment and cleaning up

Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: 5 °C - 25 °C. Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Keep only in the original container. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, oxidizing agents.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
2.2.4-Trimethyl-1.3-Pentanediol Diisobutyrate	оѕна	2002

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 3 / 16

Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Long-term sys	temic effects inhalation	2.45 mg/r	n³	
	Long-term sys	temic effects dermal	1.3 mg/kg		
droxypropyl methacrylate	, ,			•	
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Long-term sys	temic effects inhalation	14.7 mg/r	n³	
	Long-term sys	temic effects dermal	4.2 mg/kg	g bw/day	
1'-(p-tolylimino)dipropan-2-ol					
Effect level (DNEL/DMEL)	Туре	Value			Remark
DNEL	Long-term sys	temic effects inhalation	2.47 mg/r		
		temic effects dermal	0.7 mg/kg	g bw/day	
isopropyl-2,2-dimethyltrimethy	<u>/lene diisobutyrate</u>				
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	8		17.62 mg/		
Long-term syste		temic effects dermal	5 mg/kg b	w/day	
NEL/DMEL - General populatio	<u>n</u>				
hylene dimethacrylate					
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL		temic effects inhalation	1.4 mg/m		
		temic effects dermal	0.83 mg/k		
ada a a a a a a a a a a a a a a a a a a	Long-term sys	temic effects oral	0.83 mg/k	kg bw/day	
vdroxypropyl methacrylate	_				
Effect level (DNEL/DMEL)	Туре		Value	2	Remark
DNEL		temic effects inhalation	8.8 mg/m		
		temic effects dermal	2.5 mg/kg	•	
Al (a tabilia : Al)	Long-term sys	temic effects oral	2.5 mg/kg	g bw/day	
1'-(p-tolylimino)dipropan-2-ol					
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL		Long-term systemic effects oral		kg bw/day	
isopropyl-2,2-dimethyltrimethy			Value		
Effect level (DNEL/DMEL)		Туре			Remark
DNEL	Long-term systemic effects inhalation		4.35 mg/r		
		Long-term systemic effects dermal		w/day	
	Long-term sys	emic effects oral 5 mg/kg bw,		w/day	
NEC hylene dimethacrylate					
Compartments		Value		Remark	
Fresh water		0.139 mg/l	Value		
Marine water		0.014 mg/l		+	
		<u>.</u>		+	
Fresh water (intermittent relea STP	ses)	0.15 mg/l		+	
Fresh water sediment		57 mg/l		+	
			1.6 mg/kg sediment dw		
Marine water sediment Soil		<u> </u>	0.16 mg/kg sediment dw		
/droxypropyl methacrylate		0.239 mg/kg soil dw			
Compartments		Value		Remark	
Fresh water				Remark	
Fresh water (intermittent relea	cocl		0.904 mg/l		
· · · · · · · · · · · · · · · · · · ·	565)		0.972 mg/l		
Marine water Marine water (intermittent rele	22505)	0.904 mg/l		+	
•	casesj	0.972 mg/l		+	
STP		<u>.</u>	10 mg/l		
		6.28 mg/kg sediment dw	6.28 mg/kg sediment dw		
Marine water sediment		U, U		+	
Soil 1'-(p-tolylimino)dipropan-2-ol		0.727 mg/kg soil dw			
		Value		Domark	
·		Value		Remark	
		0.017 mg/l 0.002 mg/l		+	
Fresh water	Marine water				
Fresh water Marine water			0.17 mg/l		
Fresh water Marine water Fresh water (intermittent relea	ses)	0.17 mg/l		_	
Fresh water Marine water Fresh water (intermittent relea STP	ses)	0.17 mg/l 199.5 mg/l			
Fresh water Marine water Fresh water (intermittent relea	ses)	0.17 mg/l			

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 4 / 16

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Compartments	Value	Remark
Fresh water	0.014 mg/l	
Marine water	0.001 mg/l	
STP	3 mg/l	
Fresh water sediment	5.29 mg/kg sediment dw	
Marine water sediment	0.529 mg/kg sediment dw	
Soil	1.05 mg/kg soil dw	
Oral	83.3 mg/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer. The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Remark	Protection index
nitrile rubber	> 480 minutes	0.5 mm	Class 6

c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Paste
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Light beige
Particle size	No data available in the literature
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available in the literature
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	No data available in the literature
Evaporation rate	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.7 ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	Not applicable
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	No data available in the literature

9.2. Other information

at the terminal	1-01 / 2 00 00
Absolute density	1720 kg/m³ ; 20 °C

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 5 / 16

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with (strong) oxidizers.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

ANCHOR A

No (test)data on the mixture available Judgement is based on the relevant ingredients

ethylene dimethacrylate Route of exposure Parameter Method Value Exposure time Species Value Remark determination Oral LD50 8700 mg/kg Rat (male / Experimental value female) Dermal LD50 OECD 402 > 2000 mg/kg bw Rat (male / Experimental value female) Inhalation Data waiving

hydroxypropyl methacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	OECD 401	> 2000 mg/kg bw	24 h	Rat (male /	Experimental value	
					female)		
Dermal	LD50		> 5000 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation						Data waiving	

1,1'-(p-tolylimino)dipropan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	l	25 mg/kg bw - 200 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw/day		Rat (male / female)	Experimental value	
Inhalation						Data waiving	

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	OECD 425	> 2000 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw		Rabbit (male / female)	Experimental value	
Inhalation	LCL0		> 5.3 mg/l	6 h	Rat	Experimental value	

<u>Conclusion</u>

Not classified for acute toxicity

Corrosion/irritation

ANCHOR A

No (test)data on the mixture available Classification is based on the relevant ingredients

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 6 / 16

ethylen	ie dime	thacry	/late

Route of exposure	Result	Method	Exposure time	Time point	 Value determination	Remark
Eye	Not irritating	Draize Test	72 h	7 days	Experimental value	
Skin	Not irritating	Draize Skin Test	24 h	24; 72 hours	Weight of evidence	
Inhalation	Irritating; STOT SE cat.3				Annex VI	

hydroxypropyl methacrylate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Irritating	Draize Test		24; 48; 72 hrs; 4; 5; 7 days	Rabbit	l '	Single treatment without rinsing
Skin	Not irritating	Draize Test	24 h	24; 72 hours	Rabbit	Experimental value	

1,1'-(p-tolylimino)dipropan-2-ol

Route of exposure	Result	Method	Exposure time	Time point	 Value determination	Remark
Eye	Irritating	OECD 405	24 h	1; 24; 48; 72; 168 hours	Experimental value	
Skin	Not irritating	OECD 404	4 h	1; 24; 48; 72; 168 hours	 Experimental value	

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Route of exposure	Result	Method	Exposure time	Time point	-	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours		Experimental value	Single treatment
Skin	Not irritating	OECD 404	4 h	1; 24; 48; 72 hours	Rabbit	Experimental value	

Conclusion

May cause respiratory irritation. Not classified as irritating to the skin Not classified as irritating to the eyes

Respiratory or skin sensitisation

ANCHOR A

No (test)data on the mixture available

Classification is based on the relevant ingredients

$\underline{\text{ethylene dimethacrylate}}$

Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination	Remark
				point			
Skin	Sensitizing	OECD 429			Mouse (female)	Experimental value	
Skin	Sensitizing				Human	Experimental value	

hydroxypropyl methacrylate

Route of exposure	Result	Method	•	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	Patch test			Human (male / female)	Literature study	
Dermal (on the ears)	Not sensitizing	Equivalent to OECD 429	3 day(s)		Mouse (female)	Experimental value	

1,1'-(p-tolylimino)dipropan-2-ol

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		Guinea pig (female)	Experimental value	

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Human observation		Human (male / female)	Experimental value	

Conclusion

May cause an allergic skin reaction. Not classified as sensitizing for inhalation

Specific target organ toxicity

ANCHOR A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 7 / 16

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	•	Value determination
Oral (stomach tube)	NOAEL	OECD 422	100 mg/kg bw/day		No effect	49 day(s)	Rat (male)	Experimental value
Oral (stomach tube)	NOAEL	OECD 422	300 mg/kg bw/day		No effect		Rat (female)	Experimental value
Dermal	NOAEC local effects		100 mg/kg bw/day	Skin	No effect	78 weeks (daily, 5 days / week)	Mouse (male)	Read-across
Dermal	NOAEC systemic effects		500 mg/kg bw/day	Kidney	No adverse systemic effects	78 weeks (6h / day, 5 days / week)	Mouse (male)	Read-across
Inhalation	NOAEC	OECD 413	1232 mg/m³ air		No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value

hydroxypropyl methacrylate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL	OECD 422	300 mg/kg bw		No effect	49 day(s)		Experimental value
Dermal								Data waiving
Inhalation	_	Subacute toxicity test	0.5 mg/l			3 weeks (6h / day, 5 days / week)	Rat (male / female)	Literature study

1,1'-(p-tolylimino)dipropan-2-ol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL systemic effects	OECD 422	40 mg/kg bw/day		No adverse systemic effects			Experimental value
Oral (stomach tube)	NOAEL systemic effects	OECD 422	20 mg/kg bw/day		No adverse systemic effects		Rat (female)	Experimental value

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (diet)	NOAEL	Subchronic	750 mg/kg	Liver	No effect	13 week(s)	Rat (female)	Experimental
		toxicity test	bw/day					value

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

ANCHOR A

No (test)data on the mixture available
Judgement is based on the relevant ingredients

ethylene dimethacrylate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
activation, negative					
without metabolic					
activation					

hydroxypropyl methacrylate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic	OECD 471	Bacteria (S.typhimurium)		Experimental value	
activation, negative					
without metabolic					
activation					

1,1'-(p-tolylimino)dipropan-2-ol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster lung fibroblasts (V79)	No effect	Experimental value	

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 8 / 16

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster ovary (CHO)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	EU Method B.13/14	Bacteria (S.typhimurium)		Experimental value	

Mutagenicity (in vivo)

ANCHOR A

No (test)data on the mixture available Judgement is based on the relevant ingredients

ethylene dimethacrylate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Oral)	OECD 474		Mouse (male / female)		Experimental value

hydroxypropyl methacrylate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474		Mouse (male / female)		Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

ANCHOR A

No (test)data on the mixture available Judgement is based on the relevant ingredients

ethylene dimethacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation	NOAEC	Equivalent to OECD 451	≥ 2.05 mg/l air	102 weeks (6h / day, 5 days / week)	Rat (female)	No carcinogenic effect		Experimental value
Inhalation	NOAEC	Equivalent to OECD 451	≥ 4.1 mg/l air	102 weeks (6h / day, 5 days / week)	Rat (male)	No carcinogenic effect		Experimental value
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 90.3 mg/kg bw/day	104 week(s)	Rat (male)	No carcinogenic effect		Experimental value
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 193.8 mg/kg bw/day	104 week(s)	Rat (female)	No carcinogenic effect		Experimental value

| Note of | Parameter | Method | Variety | Var

Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value
exposure								determination
Inhalation	NOAEC	Equivalent to	≥ 1000 ppm	102 weeks (6h / day,	Rat (male)	No carcinogenic		Experimental
(vapours)		OECD 451		5 days / week)		effect		value
Oral	NOAEL	Carcinogenic	≥ 90.3 mg/kg	104 weeks (daily)	Rat (male)			Experimental
(drinking		toxicity study	bw/day					value
water)								

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

ANCHOR A

No (test)data on the mixture available Judgement is based on the relevant ingredients ethylene dimethacrylate

Parameter Method Value Exposure time Species Effect Organ Value determination Developmental toxicity NOAEL OECD 414 500 mg/kg 15 days (1x / day) Rat No effect Foetus Experimental bw/day (Oral (stomach tube)) value 100 mg/kg Maternal toxicity (Oral NOAEL OECD 414 15 days (1x / day) No effect Rat Experimental (stomach tube)) bw/day value NOAEL > 1000 Effects on fertility (Oral Equivalent to Rat (male / No effect Experimental (stomach tube)) OECD 422 mg/kg female) value bw/day

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

 Revision number: 0502
 Product number: 45230
 9 / 16

hydroxypropyl methacrylate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	OECD 414	450 mg/kg bw/day	23 day(s)	Rabbit	No effect		Experimental value
	NOAEC	OECD 414	≥ 8.3 mg/l air	10 days (6h / day)	Rat	No effect		Experimental value
Maternal toxicity	LOEC	OECD 414	0.41 mg/l air	10 days (6h / day)	Rat	Reduced body weight and food consumption		Experimental value
	NOAEL	OECD 414	50 mg/kg bw/day	23 day(s)	Rabbit	No effect		Experimental value
Effects on fertility	NOAEL (P/F1)	OECD 416	400 mg/kg bw/day		Rat (male / female)	No effect		Experimental value

1,1'-(p-tolylimino)dipropan-2-ol

	Parameter	Method	Value	Exposure time	Species	Effect	- 0-	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	20 mg/kg bw/day	14 days (1x / day)	Rat	No effect		Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	20 mg/kg bw/day	14 days (1x / day)	Rat	No effect		Experimental value
Effects on fertility (Oral (stomach tube))	NOAEL (P)	OECD 422	40 mg/kg bw/day		Rat (male)	No effect	Male reproductive organ	Experimental value
	NOAEL (P)	OECD 422	20 mg/kg bw/day		Rat (female)		Female reproductive organ	

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

	Parameter	Method	Value	Exposure time	Species	Effect	1- 0-	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	300 mg/kg bw/day	28 days (gestation, daily)	Rabbit (female)	No effect		Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	1000 mg/kg bw/day	28 days (gestation, daily)	Rabbit	No effect		Experimental value
Effects on fertility (Oral (diet))	NOAEL	OECD 421	276 mg/kg bw/day	51 day(s)	Rat (male)	No effect		Weight of evidence
	NOAEL	OECD 421	359 mg/kg bw/day	40 day(s) - 51 day(s)	Rat (female)	No effect		Weight of evidence

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

ANCHOR A

No (test)data on the mixture available

Chronic effects from short and long-term exposure

ANCHOR A

Skin rash/inflammation.

SECTION 12: Ecological information

12.1. Toxicity

ANCHOR A

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 10 / 16

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinatio
Acute toxicity fishes	LC50	OECD 203	15.95 mg/l	96 h	Danio rerio	Static system	Water	Experimental value
Acute toxicity crustacea	EC50	OECD 202	44.9 mg/l	48 h	Daphnia magna	Static system		Experimental value
Toxicity algae and other aquatic plants	ErC50	OECD 201	19 mg/l	96 h	Pseudokirchneri ella subcapitata	Static system		Experimental value
Long-term toxicity fish					•			Data waiving
Long-term toxicity aquatic crustacea	NOEC	OECD 211	5.05 mg/l	21 day(s)	Daphnia magna	Semi-static system		Experimental value GLP
Toxicity aquatic micro- organisms	EC10	ISO 8192	> 100 mg/l	180 minutes	Activated sludge	Static system	Fresh water	Experimental value Respiration
ydroxypropyl methacrylate								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	DIN 38412- 15	493 mg/l	48 h	Leuciscus idus	Static system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	OECD 202	> 143 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 97.2 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value
aquatic plants	NOEC	OECD 201	> 97.2 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC	OECD 211	45.2 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value Reproduction
,1'-(p-tolylimino)dipropan-2-ol								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinatio
Acute toxicity fishes	LC50		17 mg/l	96 h	Danio rerio	Static system	Fresh water	Experimental value Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	28.8 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	245 mg/l	72 h	Desmodesmus subspicatus	Static system	Salt water	Experimental value GLP
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro- organisms	EC10	Equivalent to OECD 209	> 1995 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value Nominal concentration
L -isopropyl-2,2-dimethyltrimeth	ylene diisobuty	<u>rate</u>						
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	NOEC	Equivalent to OECD 203	≥ 6 mg/l	96 h	Lepomis macrochirus	Flow- through system	Fresh water	Experimental value GLP
Acute toxicity crustacea	EC50	Equivalent to EU Method C.2	> 1.46 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value Greater than the water solubility
	NOEC	Equivalent to EU Method C.2	1.46 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value Greater than the water solubility
		0500.004	> 7.49 mg/l	72 h	Pseudokirchneri	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	ErC50	OECD 201	7.45 mg/i		ella subcapitata			Greater than the water solubility
_	ErC50	OECD 201	3.56 mg/l	72 h	ella subcapitata Pseudokirchneri ella subcapitata	Static system	Fresh water	
_					Pseudokirchneri	Static system	Fresh water	water solubility Experimental value

Conclusion

Toxicity aquatic microorganisms

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Data waiving

Revision number: 0502 Product number: 45230 11 / 16

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

ethylene dimethacrylate

Biod	egr	ada	tion	water
------	-----	-----	------	-------

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	69 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	9.644 h	500000 /cm³	Calculated value

Half-life water (t1/2 water)

Method		Primary degradation/mineralisation	Value determination
Hydrowin v2.00	1.6 year(s) - 15.7 year(s)	Primary degradation	Calculated value

hydroxypropyl methacrylate

Biodegradation water

	Method	Value	Duration	Value determination			
	OECD 301C: Modified MITI Test (I)	81 %	4 week(s)	Experimental value			
ь	Phototypusformation air (DTEO air)						

Phototransformation air (DT50 air)

Met	thod	Value	Conc. OH-radicals	Value determination
AOF	PWIN v1.92	13.453 h	0.5E6 /cm ³	Calculated value

1,1'-(p-tolylimino)dipropan-2-ol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	39.1 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
SRC AOP v1.92	1.762 h	0.5E6 /cm³	QSAR

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Biodegradation water

	Method	Value	Duration	Value determination			
	OECD 301B: CO2 Evolution Test	70.73 %; GLP	28 day(s)	Experimental value			
_	Pinda and data and i						

Biodegradation soil

Method	Value	Duration	Value determination
			Data waiving

Half-life water (t1/2 water)

indi ine water (tr/ 2 water)			
Method	Value	Primary	Value determination
		degradation/mineralisation	
OECD 111: Hydrolysis as a function of pH	25 day(s) - 211 day(s); GLP	Primary degradation	Experimental value

Conclusion

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

ANCHOR A

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

ethylene dimethacrylate

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	2.96			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		2.4		Experimental value

hydroxypropyl methacrylate

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		0.97	20 °C	Experimental value

1,1'-(p-tolylimino)dipropan-2-ol

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		2.1	24 °C	Experimental value

Reason for revision: 3 Publication date: 2008-12-01 Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 12 / 16

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 305	153/10: GLD	23 day(s)	Lepomis macrochirus	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
			25 °C	QSAR

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

ethylene dimethacrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.367 - 2.12	QSAR

hydroxypropyl methacrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc		1.90	Calculated value

1,1'-(p-tolylimino)dipropan-2-ol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.76 - 2.09	Calculated value

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

(log) Koc

Parameter	Method	Value	Value determination
log Koc		3.6	QSAR

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

ANCHOR A

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009) $\,$

ethylene dimethacrylate

Groundwater

Groundwater pollutant

hydroxypropyl methacrylate

Groundwater

Groundwater pollutant

1,1'-(p-tolylimino)dipropan-2-ol

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 13 / 16

Waste material code packaging (Directive 2008/98/EC). 15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Transport	Not subject	
14.2. UN proper shipping name		
14.3. Transport hazard class(es)		
Hazard identification number		
Class		
Classification code		
L4.4. Packing group		
Packing group		
Labels		
14.5. Environmental hazards		
Environmentally hazardous substance mark	no	
L4. <u>6</u> . Special precautions for user		
Special provisions		
Limited quantities		

SECTION 15: Regulatory information

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

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

VOC content Directive 2010/75/EU

Annex II of MARPOL 73/78

VOC content	Remark
6.9 %	

Not applicable, based on available data

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances. mixtures and articles.

and use of certain dangerous	s substances, mixtures and articles.	
	Designation of the substance, of the group of	Conditions of restriction
	substances or of the mixture	
· ethylene dimethacrylate · hydroxypropyl methacrylate · 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even wi ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopte by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall namp oils, labelled with H304, intended for supply to the general public are visibly, legib and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage"; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legib and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agenc to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorati

National legislation Belgium

ANCHOR A

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 14 / 16

No data available

National legislation The Netherlands

ANCHOR A

Waterbezwaarlijkheid B (4); Algemene Beoordelingsmethodiek (ABM)

National legislation France

ANCHOR A

No data available

National legislation Germany ANCHOR A

	WGK	
٦.	thylene	dimethacry

1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 /late

TA-Luft

5.2.5 hydroxypropyl methacrylate

TA-Luft 5.2.5

1,1'-(p-tolylimino)dipropan-2-ol

TA-Luft 5.2.5/I

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate TA-Luft 5.2.5/1

National legislation United Kingdom

ANCHOR A

No data available

Other relevant data

ANCHOR A

No data available

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

H300 Fatal if swallowed.

H317 May cause an allergic skin reaction.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure if inhaled.

H412 Harmful to aquatic life with long lasting effects.

INTERNAL CLASSIFICATION BY BIG (*)

ADI Acceptable daily intake AOEL

Acceptable operator exposure level CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL Derived Minimal Effect Level DNEL Derived No Effect Level EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level No Observed Effect Concentration NOEC

OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative & Toxic **PNEC Predicted No Effect Concentration Sludge Treatment Process** STP

vPvR very Persistent & very Bioaccumulative

Specific concentration limits CLP

STOT SE 3; H335 CLP Annex VI (ATP 0) C ≥ 10 % ethylene dimethacrylate

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European

Reason for revision: 3 Publication date: 2008-12-01

Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 15 / 16

Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: 3 Publication date: 2008-12-01
Date of revision: 2019-08-12

Revision number: 0502 Product number: 45230 16 / 16