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

+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	Hazard 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

H-statements

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

P-statements

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

P102 Keep out of reach of children.

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

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

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

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

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

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Product number: 45230

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

P405 Store locked up

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	97-90-5 202-617-2	I	Skin Sens. 1; H317 STOT SE 3; H335	(1)(8)(10)	Constituent
hydroxypropyl methacrylate	27813-02-1 248-666-3	I	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	(1)(2)	Constituent
1,1'-(p-tolylimino)dipropan-2-ol	38668-48-3 254-075-1		Acute Tox. 2; H300 Eye Dam. 1; H318 Aquatic Chronic 3; H412	(1)	Constituent

⁽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:

If you feel unwell, seek medical advice.

After inhalation:

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

After skin contact:

Wash immediately with lots of water. 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. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. 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:

Water spray. ABC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

Solid water jet ineffective as extinguishing medium.

5.2. Special hazards arising from the substance or mixture

Reason for revision: 2; 3 Publication date: 2008-12-01

Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 2 / 14

⁽¹⁾ For H-statements in full: see heading 16

⁽²⁾ Substance with a Community workplace exposure limit

⁽⁸⁾ Specific concentration limits, see heading 16

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. 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. 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. 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.

Belgium

•		
Silices cristallines : quartz (poussières alvéolaires)	Time-weighted average exposure limit 8 h	0.1 mg/m ³
The Netherlands		
Silicium(di)oxide kwarts (respirabel)	Time-weighted average exposure limit 8 h (Public occupational exposur limit value)	e 0.075 mg/m³
France		
Silices cristallines quartz, fraction alvéolaire	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.1 mg/m ³
UK		
Silica, respirable crystalline	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.1 mg/m ³

Reason for revision: 2; 3 Publication date: 2008-12-01

Date of revision: 2017-06-10

 Revision number: 0500
 Product number: 45230
 3 / 14

USA (TLV-ACGIH)

Silica-Crystalline Quartz

Time-weighted average exposure limit 8 h (TLV - Adopted Value)

0.025 mg/m³ (R)

(R): Respirable fraction

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
Crystalline Silica	OSHA	ID 142
Quartz (silica, crystalline, by XRD)	NIOSH	7500
quartz	NIOSH	7601
quartz	NIOSH	7602
Silica, Crystalline, Respirable	NIOSH	7500
Silica, Crystalline	NIOSH	7601
Silica, Crystalline	NIOSH	7602
Silica, Quartz in Coal Dust (Silica in coal mine dust)	NIOSH	7603

$\bf 8.1.3$ 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 DNEL/PNEC values

DNEL/DMEL - Workers

ethylene dimethacrylate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects oral	2.45 mg/m ³	
	Long-term systemic effects dermal	1.3 mg/kg bw/day	

hydroxypropyl methacrylate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	14.7 mg/m³	
	Long-term systemic effects dermal	4.2 mg/kg bw/day	

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

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	2 mg/m³	
	Long-term systemic effects dermal	0.6 mg/kg bw/day	

DNEL/DMEL - General population

ethylene dimethacrylate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	1.47 mg/m³	
	Long-term systemic effects dermal	100 mg/kg bw/day	
	Long-term systemic effects oral	100 mg/kg bw/day	

hydroxypropyl methacrylate

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	8.8 mg/m³	
	Long-term systemic effects dermal	2.5 mg/kg bw/day	
	Long-term systemic effects oral	2.5 mg/kg bw/day	

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

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	0.4 mg/m ³	
	Long-term systemic effects dermal	0.3 mg/kg bw/day	
	Long-term systemic effects oral	0.3 mg/kg bw/day	

<u>PNEC</u>

ethylene dimethacrylate

Value	Remark
0.139 mg/l	
0.014 mg/l	
0.15 mg/l	
57 mg/l	
1.6 mg/kg sediment dw	
0.16 mg/kg sediment dw	
0.239 mg/kg soil dw	
	0.139 mg/l 0.014 mg/l 0.15 mg/l 57 mg/l 1.6 mg/kg sediment dw 0.16 mg/kg sediment dw

hydroxypropyl methacrylate

Compartments	Value	Remark
Fresh water	0.904 mg/l	
Marine water	0.904 mg/l	
STP	10 mg/l	
Fresh water sediment	6.28 mg/kg sediment dw	
Marine water sediment	6.28 mg/kg sediment dw	
Soil	0.727 mg/kg soil dw	

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 4 / 14

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

Compartments	Value	Remark
Fresh water	0.017 mg/l	
Marine water	0.0017 mg/l	
Aqua (intermittent releases)	0.17 mg/l	
STP	199.5 mg/l	
Fresh water sediment	0.0782 mg/kg sediment dw	
Marine water sediment	0.00782 mg/kg sediment dw	
Soil	0.005 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

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.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. 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. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

Materials	Breakthrough time	Thickness	
nitrile rubber	> 480 minutes	0.5 mm	

- materials (good resistance)

Nitrile rubber.

c) Eye protection:

Face shield.

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
Colour	Light beige
Particle size	No data available
Explosion limits	No data available
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Relative vapour density	Not applicable
Vapour pressure	No data available
Solubility	Water ; insoluble
Relative density	1.72 ; 20 °C
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	No data available

9.2. Other information

No data available

Reason for revision: 2; 3 Publication date: 2008-12-01

Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 5 / 14

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

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	Other	8700 mg/kg		Rat (male/female)	Literature study	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male/female)	Experimental value	
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		Rat (male/female)	Experimental value	
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		25 mg/kg bw - 200 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw/day	24 h	Rat (male/female)	Experimental value	
Inhalation						Data waiving	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

<u>ANCHOR A</u>

No (test)data on the mixture available

Classification is based on the relevant ingredients

ethylene dimethacrylate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Not irritating	Other	72 h	7 days	Rabbit	Experimental value	
Skin	Not irritating	Draize Skin Test	24 h	24; 72 hours	Rabbit	Weight of evidence	
Inhalation	Irritating					Literature study	

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 6 / 14

hydroxypropyl methacrylate

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Not irritating	Draize Test		1; 2; 3; 4; 5; 7 days	Rabbit	Experimental value	
Eye	Irritating	Draize Test			Rabbit	Literature study	
Skin	Not irritating		24 h	24; 72 hours	Rabbit	Experimental value	

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

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

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

ethylene dimethacrylate

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406		Mouse (female)	Experimental value	
Skin	Sensitizing			Human	Experimental value	

hydroxypropyl methacrylate

Route of exposur	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	Patch test on human skin			Human (male/female)	Literature study	
Skin	Not sensitizing	Equivalent to OECD 429			Mouse (female)	Experimental value	

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

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

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

ethylene dimethacrylate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral	NOAEL		100 mg/kg bw/day		Reduced body weight and food consumption; CNS effects; signs of necropsy		Rat (male/female)	Experimental value
Dermal	NOAEL		100 mg/kg bw/day	Skin		78 weeks (daily, 5 days/week)	Mouse (male)	Read-across

Reason for revision: 2; 3 Publication date: 2008-12-01

Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 7 / 14

hydroxypropyl methacrylate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
								determination
Oral (stomach tube)	NOAEL	OECD 422	300 mg/kg bw		No effect	49 day(s)	Rat (male)	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

quartz (SiO2)

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	 Value determination
Inhalation			STOT RE cat.1				Literature study

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

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

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

ANCHOR A

No (test)data on the mixture available

ethylene dimethacrylate

Result	Method	Test substrate	Effect	Value determination
Negative		Mouse fibroblasts		Experimental value

hydroxypropyl methacrylate

Result	Method	Test substrate	Effect	Value determination
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
Negative with metabolic	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
activation, negative without				
metabolic activation				

Mutagenicity (in vivo)

ANCHOR A

No (test)data on the mixture available

ethylene dimethacrylate

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

1 1					
Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OFCD 474		Mouse (male/female)		Experimental value

Carcinogenicity

ANCHOR A

No (test)data on the mixture available

 $\label{lem:continuous} \mbox{\bf Judgement is based on the relevant ingredients}$

hydroxypropyl methacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Inhalation (vapours)		Equivalent to OECD 451	• • •	102 weeks (6h/day, 5 days/week)	` '	No carcinogenic effect		Experimental value
Oral (drinking water)	NOAEL		≥ 90.3 mg/kg bw/day	104 weeks (daily)	Rat (male)			Experimental value

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 8 / 14

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	- 0-	Value determination
Developmental toxicity	NOAEL (F1)	OECD 422	≥ 1000 mg/kg bw/day	/ (- /	Rat (male/female)	No effect		Read-across
	NOAEL	OECD 414	500 mg/kg bw/day	15 day(s)	Rat	No effect		Experimental value
Effects on fertility	NOAEL (P)	OECD 422	> 1000 mg/kg bw/day	/ (- /	(male/female)	Change in the haemogramme/blood composition	Blood	Read-across

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
Effects on fertility	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)	No effect	Female reproductive organ	

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 is based on the relevant ingredients

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 9 / 14

ethylene dimethacrylate

	Parameter	Method	Value	Duration	Species		Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	15.95 mg/l	96 h	Danio rerio	Static system		Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	44.9 mg/l	48 h	Daphnia magna	Static system		Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	19 mg/l	96 h	Pseudokirchnerie Ila subcapitata	Static system		Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	5.05 mg/l	21 day(s)		Semi-static system		Experimental value; GLP
Toxicity aquatic micro- organisms	EC50	ISO 8192	570 mg/l	3 h	Activated sludge	Static system		Experimental value; GLP

hydroxypropyl 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		Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	> 143 mg/l	48 h		Semi-static system		Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	OECD 201	> 97.2 mg/l	72 h	Pseudokirchnerie Ila subcapitata	Static system		Experimental value; GLP
	NOEC	OECD 201	> 97.2 mg/l	72 h	Pseudokirchnerie Ila subcapitata	Static system		Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	45.2 mg/l	21 day(s)		Semi-static system		Experimental value; GLP

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

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Other	17 mg/l	96 h	Danio rerio	Static system		Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	28.8 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	245 mg/l	72 h	Desmodesmus subspicatus	Static system	Salt water	Experimental value; GLP
Toxicity aquatic micro- organisms	EC10	OECD 209	> 1995 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value

Conclusion

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

12.2. Persistence and degradability

ethylene dimethacrylate

Biodegradation 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			Value determination
		degradation/mineralisation	
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 301E: Modified OECD Screening Test	94.2 %	28 day(s)	Experimental 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	500000 /cm³	QSAR

Reason for revision: 2; 3 Publication date: 2008-12-01

Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 10 / 14

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		2.96			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 102		2.4		Experimental value

hydroxypropyl methacrylate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		≤ 100		Pisces	
		3.2; QSAR		Pisces	

Log Kow

<u>, </u>						
Method	Remark	Value	Temperature	Value determination		
OECD 102		0.97				

quartz (SiO2)

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (inorganic)			

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

Log Kow

_	LOB NOW						
	Method	Remark	Value	Temperature	Value determination		
	OFCD 107		2 1	24 °C	Experimental value		

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

ethylene dimethacrylate

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.000000378 atm m ³ /mol		25 °C		Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction	Fraction soil	Fraction water	Value determination
			sediment			
Mackay level III	42.7 %		0.0378 %	43.8 %	13.5 %	Calculated value

hydroxypropyl methacrylate

(log) Koc

Parameter	Method	Value	Value determination
Koc		80	Estimated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
2.33E-008 atm m ³ /mol		25 °C		Estimated value
0.000946 Pa.m³/mol	SRC HENRYWIN v3.20	25 °C		Estimated value

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

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.9185	Calculated value
	•		•

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.0000398 Pa.m³/mol		25 °C		Calculated value

Conclusion

Contains component(s) that adsorb(s) into the soil

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.

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 11 / 14

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)

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.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number				
Transport	Not subject			
14.2. UN proper shipping name				
14.3. Transport hazard class(es)				
Hazard identification number				
Class				
Classification code				
14.4. Packing group				
Packing group				
Labels				
14.5. Environmental hazards				
Environmentally hazardous substance mark	no			
14.6. Special precautions for user				
Special provisions				
Limited quantities				
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	14.7. Transport in bulk according to Annex II of Marpol and the IBC Code			
Annex II of MARPOL 73/78				

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark	
6.9 %		

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.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
ethylene dimethacrylate hydroxypropyl methacrylate	criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:	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 with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market.

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 12 / 14

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.

- 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 R65 or 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) adopted 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 ensure, before the placing on the market, that the following requirements are met:
- a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly 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 R65 or H304, intended for supply to the general public are legibly 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 R65 or 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 Agency 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 decorative lamps, labelled R65 or H304, intended for supply to the general public.
- 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'

National legislation Belgium

ANCHOR A

No data available

National legislation The Netherlands

Α	N	C	Н	O	R	Α

	Waterbezwaarlijkheid	B (4)
q	uartz (SiO2)	
	SZW - Lijst van	silica (respirabel stof, kristallijn); Listed in SZW-list of carcinogenic substances
	kankerverwekkende stoffen	

National legislation France

ANCHOR A

No data available

National legislation Germany

				_	
Α	N	CI	40)R	Α

WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährder		
	Stoffe (VwVwS) of 27 July 2005 (Anhang 4)		
ethylene dimethacrylate			
TA-Luft	5.2.5		
hydroxypropyl methacrylate			
TA-Luft	5.2.5		
quartz (SiO2)			
TA-Luft	5.2.1		
L,1'-(p-tolylimino)dipropan-2-ol			
TA-Luft	5.2.5; I		

National legislation United Kingdom

ANCHOR A

No data available

Other relevant data

ANCHOR A

No data available

quartz (SiO2)

IARC - classification 1; Silica dust, crystalline, in the form of quartz or cristobalite	
TLV - Carcinogen	Silica-Crystalline Quartz: A2

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

Reason for revision: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230 13 / 14

SECTION 16: Other information

Full text of any H-statements referred to under headings 2 and 3:

H300 Fatal if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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

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
NOEC No Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

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

vPvB very Persistent & very Bioaccumulative

Specific concentration limits CLP

ethylene dimethacrylate	C ≥ 10 %	CLP Annex VI (ATP 0)
	C ≥ 10 %	CLP Annex VI (ATP 0)

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. Old versions must be destroyed. 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 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: 2; 3 Publication date: 2008-12-01
Date of revision: 2017-06-10

Revision number: 0500 Product number: 45230

14 / 14