

Trade name: FotoDent guide

Substance number: 9370

Version: 3 / GB

Date revised: 16.07.2025

Replaces Version: 2 / GB

Print date: 16.07.2025

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

1.1. Product identifier

FotoDent guide

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

Use of the substance/preparation

Material on methacrylate resin basis for DLP systems with 385nm resp. 405nm LED for manufacturing of dental surgical drill guides for tooth-supported and/or teethridge-supported and surgical invasive application

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Dreve Dentamid GmbH

Max-Planck-Straße 31

DE-59423 Unna

Telephone no. +49 2303 8807-0

Fax no. +49 2303 8807-29

Information provided by / telephone Department Research & Development: Fax: +49 2303 8807-562

E-mail address of person responsible for this SDS
sicherheitsdatenblatt@dreve.com

1.4. Emergency telephone number

Henkel Fire Department / 24h-Emergency-Contact-No.: +49 211 797-3350

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319
Skin Sens. 1	H317
Repr. 1B	H360F
Aquatic Chronic 3	H412

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



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Signal word ***

Danger

Hazard statements ***

H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H360F May damage fertility.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements ***

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/ attention.
 P501.1 Dispose of contents/container to industrial incineration plant.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains *** 2-hydroxyethyl methacrylate; Hydroxypropyl methacrylate; 7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate;
 Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Supplemental information**Further supplemental information *****

Restricted to professional users

2.3. Other hazards

No special hazards have to be mentioned.

This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms. The product contains substances meeting the vPvB criteria. See SECTION 3 in this safety data sheet. The product contains no PBT substances

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures**Hazardous ingredients *******7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate**

CAS No.	72869-86-4		
EINECS no.	276-957-5		
Registration no.	01-2120751202-68		
Concentration	>= 2,5	< 10	%
Classification (Regulation (EC) No. 1272/2008)			
	Skin Sens. 1B	H317	
	Aquatic Chronic 2	H411	

2-hydroxyethyl methacrylate

CAS No.	868-77-9		
EINECS no.	212-782-2		
Registration no.	01-2119490169-29		
Concentration	>= 1	< 6,3	%
Classification (Regulation (EC) No. 1272/2008)			

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Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317

Additional remarks:

CLP

Regulation (EC) No 1272/2008, Annex VI, Note D

Aliphatic urethane methacrylate

Concentration	>=	1	<	10	%
Classification (Regulation (EC) No. 1272/2008)					
					Eye Irrit. 2
					H319

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

CAS No.	75980-60-8				
EINECS no.	278-355-8				
Registration no.	01-2119972295-29				
Concentration	>=	2,5	<	10	%
Classification (Regulation (EC) No. 1272/2008)					
					Repr. 1B
					H360Fd.
					Skin Sens. 1B
					H317
					Aquatic Chronic 2
					H411

Supplemental information

The substance is contained in the Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

Hydroxypropyl methacrylate

CAS No.	27813-02-1				
EINECS no.	248-666-3				
Registration no.	01-2119490226-37				
Concentration	>=	1	<	10	%
Classification (Regulation (EC) No. 1272/2008)					
					Eye Irrit. 2
					H319
					Skin Sens. 1
					H317

ATE	oral		2.000	mg/kg
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Acrylic Resin

Concentration	>=	1	<	3,6	%
Classification (Regulation (EC) No. 1272/2008)					
					Skin Irrit. 2
					H315
					Eye Irrit. 2
					H319

Further ingredients**Bumetrizole**

CAS No.	3896-11-5				
EINECS no.	223-445-4				
Registration no.	01-2119971796-18				
Concentration			<	1	%
Advice: [2]					

Supplemental information

The substance is contained in the Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

Note

[2] vPvB substance

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid

After inhalation

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

After skin contact

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO₂, powders, water spray/mist, Extinguishing measures to suit surroundings

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Pick up rest with suitable absorbent materials. Do not pick up with the help of saw-dust or other combustible substances. Clean contaminated floors and objects thoroughly, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of as prescribed.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosols. Avoid impact, friction and electro-static loading; risk of ignition! Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. No smoking. Take action to prevent static discharges. Avoid impact and friction. Use only explosion-proof equipment. Keep away from combustible material. Wear shoes with conductive soles.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on storage assembly

Do not store together with foodstuffs. Do not store with strong oxidizing agents.

Further information on storage conditions

Keep under lock and key or accessible only to specialists or people who are authorized. Keep container tightly closed and in a well-ventilated place. Keep in a cool place

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other information

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Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,233	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,145	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,0833	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,0833	mg/kg/d

2-hydroxyethyl methacrylate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	4,9	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	1,39	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	1,45	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	

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Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,83	mg/kg/d

Hydroxypropyl methacrylate

Reference substance	Hydroxypropyl methacrylate	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Concentration	14,7	mg/m ³

Type of value	Hydroxypropyl methacrylate	
	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	dermal	
Concentration	4,2	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Route of exposure	dermal	
Concentration	2,5	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Route of exposure	inhalative	
Concentration	8,8	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Route of exposure	oral	
Concentration	2,5	mg/kg

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3,3	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	1,3	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,6	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	

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Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	0,3	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,7	mg/kg

Predicted No Effect Concentration (PNEC)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Type of value	PNEC	
Type	Saltwater	
Concentration	0,00014	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,115	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	0,0115	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	0,0222	mg/kg

2-hydroxyethyl methacrylate

Type of value	PNEC	
Type	Freshwater	
Concentration	0,482	mg/l

Type of value	PNEC	
Type	Soil	
Concentration	0,476	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	3,79	mg/kg

Type of value	PNEC	
Type	Saltwater	
Concentration	0,482	mg/l

Type of value	PNEC	
Type	Marine sediment	
Concentration	3,79	mg/kg

Type of value	PNEC	
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Type	Man via the environment	
Concentration	0,83	mg/kg/d

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	1	mg/l

Hydroxypropyl methacrylate

Reference substance	Hydroxypropyl methacrylate	
Type of value	PNEC	
Type	Freshwater	
Concentration	0,904	mg/l

Type of value	Hydroxypropyl methacrylate	
Type	PNEC	
Type	Freshwater sediment	
Concentration	6,28	mg/kg

Type of value	Hydroxypropyl methacrylate	
Type	PNEC	
Type	Soil	
Concentration	0,727	mg/kg

Type of value	Hydroxypropyl methacrylate	
Type	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

Type of value	PNEC	
Type	Marine	
Concentration	0,904	mg/l

Type of value	PNEC	
Type	Marine sediment	
Concentration	6,28	mg/kg

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahehexadecane-1,16-diylbismethacrylate

Type of value	PNEC	
Type	Freshwater	
Concentration	0,01	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	4,56	mg/kg

Type of value	PNEC	
Type	Saltwater	
Concentration	0,001	mg/l

Type of value	PNEC	
Type	Marine sediment	
Concentration	0,46	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	0,91	mg/kg

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Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	3,61	mg/l

8.2. Exposure controls

General protective and hygiene measures

Do not smoke during work time. Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Do not eat or drink during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

Do not inhale vapours; Use suitable respiratory protective device in case of insufficient ventilation

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Hand protection must comply with EN 374.

Appropriate Material nitrile

Eye protection

Safety glasses

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid	
Colour	Various, depending on coloration	
Odour	characteristic	
Melting point		
Remarks	not determined	
Freezing point		
Remarks	not determined	
Boiling point or initial boiling point and boiling range		
Value	> 100	°C
Flammability		
evaluation	not determined	
Upper and lower explosive limits		
Remarks	not determined	
Flash point		
Value	100	°C
Method	closed cup	
Auto-ignition temperature		

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Remarks not determined

Decomposition temperature

Remarks not determined

pH value

Remarks not determined

Viscosity

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Vapour pressure

Remarks not determined

Density and/or relative density

Value	1,1		g/cm ³
Temperature	20	°C	

Relative vapour density

Remarks not determined

9.2. Other information**Odour threshold**

Remarks not determined

Evaporation rate (ether = 1) :

Remarks not determined

Solubility in water

Remarks virtually insoluble

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

Other information

None known

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Protect from heat and direct sunlight

10.5. Incompatible materials

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None known

10.6. Hazardous decomposition products

Irritant gases/vapours

SECTION 11: Toxicological information

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

ATE	>	10.000	mg/kg
Method	calculated value according to GHS (e.g see UN GHS)		

Acute oral toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	rat		
LD50	>	5000	mg/kg
Method	OECD 401		

2-hydroxyethyl methacrylate

Species	rat		
LD50	>	5564	mg/kg

Hydroxypropyl methacrylate

Species	rat		
LD50	>=	2000	mg/kg
Method	OECD 401		

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate

Species	rat		
LD50	>	5000	mg/kg
Method	OECD 401		

Acrylic Resin

LD50	>	2000	mg/kg
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Aliphatic urethane methacrylate

Species	rat		
LD50	>	2000	mg/kg

Bumetrizole

Species	rat (female)		
LD50	>	2000	mg/kg
Method	OECD 423		

Acute dermal toxicity

Remarks	Based on available data, the classification criteria are not met.
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Acute dermal toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	rat		
LD50	>	2000	mg/kg
Method	OECD 402		

2-hydroxyethyl methacrylate

Species	hamster		
LD50	>	5000	mg/kg
Remarks	Test conducted with a similar formulation.		

Hydroxypropyl methacrylate

Species	rabbit		
LD50	>	5000	mg/kg

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7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	

Acrylic Resin

LD50	> 2000	mg/kg
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Aliphatic urethane methacrylate

Species	rabbit	
LD50	> 2000	mg/kg

Bumetrizole

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	

Acute inhalational toxicity

Remarks	Based on available data, the classification criteria are not met.
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Acute inhalative toxicity (Components)**Acrylic Resin**

LC50	> 5	mg/l
Duration of exposure	4	h
Administration/Form	Dust/Mist	

Skin corrosion/irritation

Remarks	Based on available data, the classification criteria are not met.
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Skin corrosion/irritation (Components)**Acrylic Resin**

evaluation	irritant
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Serious eye damage/irritation

evaluation	irritant
Remarks	The classification criteria are met.

Serious eye damage/irritation (Components)**2-hydroxyethyl methacrylate**

Species	rabbit
evaluation	slightly irritant

Hydroxypropyl methacrylate

Species	rabbit
evaluation	slightly irritant

Acrylic Resin

evaluation	irritant
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Aliphatic urethane methacrylate

Species	rabbit
evaluation	irritant

Sensitization

evaluation	May cause sensitization by skin contact.
Remarks	The classification criteria are met.

Sensitization (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Route of exposure	dermal
Species	mouse
evaluation	May cause sensitization by skin contact.

2-hydroxyethyl methacrylate

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Remarks Possible sensitization potential with human beings.

Hydroxypropyl methacrylate

Species mouse
 evaluation non-sensitizing
 Method OECD 429
 Remarks May cause sensitization by skin contact.

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate

Route of exposure dermal
 Species mouse
 evaluation sensitizing

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

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

Reproductive toxicity

evaluation May damage fertility.
 Remarks The classification criteria are met.

Reproduction toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

evaluation Suspected of damaging fertility.

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)**Single exposure**

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

Repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information

12.1. Toxicity**General information**

not determined

Fish toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

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Species	carp (Cyprinus carpio)	
LC50	1,4	mg/l
Duration of exposure	96	h
Method	OECD 203	

2-hydroxyethyl methacrylate

Species	Oryzias latipes	
LC50	> 100	mg/l
Duration of exposure	96	h
Method	OECD 203	

Hydroxypropyl methacrylate

Species	Oryzias latipes	
LC50	> 100	mg/l
Duration of exposure	96	h
Method	OECD 203	

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate

Species	zebra fish (Brachydanio rerio)	
LC50	10,1	mg/l
Duration of exposure	96	h
Method	OECD 203	

Bumetrizole

Species	zebra fish (Brachydanio rerio)	
LC50	> 100	mg/l
Duration of exposure	96	h
Method	OECD 203	

Daphnia toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species	Daphnia magna	
EC50	3,53	mg/l
Duration of exposure	48	h
Method	OECD 202	

2-hydroxyethyl methacrylate

Species	Daphnia magna	
EC50	380	mg/l
Duration of exposure	48	h
Method	OECD 202	

2-hydroxyethyl methacrylate

Species	Daphnia magna	
NOEC	24,1	mg/l
Duration of exposure	21	d
Method	OECD 211	

Hydroxypropyl methacrylate

Species	Daphnia magna	
EC50	> 143	mg/l
Duration of exposure	48	h
Method	OECD 202	

Hydroxypropyl methacrylate

Species	Daphnia magna	
NOEC	45,2	mg/l
Duration of exposure	21	d
Method	OECD 211	

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate

Species	Daphnia magna	
EC50	1,2	mg/l
Duration of exposure	48	h

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Method OECD 202

Bumetrizole

Species Daphnia magna
 EC50 >= 100 mg/l
 Duration of exposure 48 h
 Method OECD 202

Bumetrizole

Species Daphnia magna
 NOEC >= 10 mg/l
 Duration of exposure 21 d
 Method OECD 211

Algae toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species Pseudokirchneriella subcapitata
 EC50 > 2,01 mg/l
 Duration of exposure 72 h
 Method OECD 201

2-hydroxyethyl methacrylate

Species Pseudokirchneriella subcapitata
 EC50 345 mg/l
 Duration of exposure 72 h
 Method OECD 201

Hydroxypropyl methacrylate

Species Pseudokirchneriella subcapitata
 EC50 > 97,2 mg/l
 Duration of exposure 72 h
 Method OECD 201

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazaheptadecane-1,16-diylbismethacrylate

Species Scenedesmus subspicatus
 EC50 > 0,68 mg/l
 Duration of exposure 72 h
 Method OECD 201

Bumetrizole

Species Scenedesmus subspicatus
 EC50 > 100 mg/l
 Duration of exposure 72 h

Bacteria toxicity (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

Species activated sludge
 EC50 > 1000 mg/l
 Duration of exposure 3 h
 Method OECD 209

2-hydroxyethyl methacrylate

Species Pseudomonas fluorescens
 EC50 > 3000 mg/l
 Duration of exposure 16 h

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazaheptadecane-1,16-diylbismethacrylate

Species activated sludge
 NOEC >= 36,1 mg/l
 Duration of exposure 14 d

Bumetrizole

Species activated sludge
 IC50 > 100 mg/l

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Duration of exposure 3 h
Method OECD 209

12.2. Persistence and degradability

General information

not determined

Biodegradability (Components)

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

Value < 0 to 10 %
Duration of test 28 d
evaluation not readily degradable

2-hydroxyethyl methacrylate

Value 92 to 100 %
Duration of test 14 d
evaluation Readily biodegradable (according to OECD criteria)

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate

Value 22 %
Duration of test 28 d
evaluation not readily degradable

Bumetrizole

Value 10 to 20 %
Duration of test 28 d
evaluation sparingly degradable

Hydroxypropyl methacrylate

Value 81 %
Duration of test 28 d
evaluation Readily biodegradable (according to OECD criteria)
Method OECD 301 C

12.3. Bioaccumulative potential

General information

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)

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

log Pow 3,1
Temperature 23 °C

2-hydroxyethyl methacrylate

log Pow 0,42
Temperature 25 °C
Method OECD 107

Hydroxypropyl methacrylate

log Pow 0,97
Temperature 20 °C

7,7,9(7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate

log Pow 3,39
Temperature 20 °C

Bumetrizole

log Pow > 6,5
Temperature 23 °C
Method OECD 117

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Bioconcentration factor (BCF) (Components)**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide**

BCF	47	to	55
Concentration	0,1	mg/l	
Duration of exposure	8	Weeks	
Medium	Freshwater		
Species	carp (Cyprinus carpio)		

Bumetrizole

BCF	7093
Duration of exposure	28 d
Species	rainbow trout (Oncorhynchus mykiss)
Method	OECD 305

12.4. Mobility in soil**General information**

not determined

12.5. Results of PBT and vPvB assessment**General information**

not determined

Results of PBT and vPvB assessment

The product contains vPvB-substances.

The product contains no PBT substances

Results of PBT and vPvB assessment (Ingredients)**Bumetrizole**

The Substance does not meet PBT-criteria.

Bumetrizole

The substance meets vPvB-criteria.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects**General information**

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Must not be disposed together with household garbage.

Dispose of waste according to applicable legislation.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.



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SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)		-	-
Label			
14.4. Packing group		-	-

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Restriction according to annex XVII to regulation (EU) No 1907/2006**

The product is subject to restrictions according to Annex XVII Regulation (EU) No. 1907/2006: Entry No. 3

Other information

All components are contained in the TSCA inventory or exempted.

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 1B	H360F	Calculation method
Aquatic Chronic 3	H412	Calculation method

Hazard statements listed in Chapter 2/3

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H360Fd.	May damage fertility. Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.

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H412

Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 2/3

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Irrit. 2	Eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1B	Skin sensitization, Category 1B

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.