



Trade name: NanoVarnish

Substance number: 72013

Version: 1 / GB

Date revised: 06.06.2023

Replaces Version: - / GB

Print date: 06.06.2023

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

1.1. Product identifier

NanoVarnish

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

Use of the substance/preparation

Light-curing lacquer for plastic dental applications

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Dreve Dentamid GmbH

Max-Planck-Straße 31

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 sicherheitsdatenblatt@dreve.com

for this SDS

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)

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
Repr. 2	H361f
STOT SE 3	H335
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

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H361f	Suspected of damaging fertility.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.

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

contains	2-Propenoic acid, reaction products with pentaerythritol; Methyl methacrylate monomer, stabilized; Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
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2.3. Other hazards

No special hazards have to be mentioned.

The product contains no PBT substances. The product contains no vPvB substances. 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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures**Hazardous ingredients****Methyl methacrylate monomer, stabilized**

CAS No.	80-62-6
EINECS no.	201-297-1
Registration no.	01-2119452498-28
Concentration	>= 25 < 50 %
Classification (Regulation (EC) No. 1272/2008)	
	Flam. Liq. 2 H225
	Skin Irrit. 2 H315
	Skin Sens. 1 H317
	STOT SE 3 H335

Additional remarks:



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

Propan-2-ol

CAS No.	67-63-0			
EINECS no.	200-661-7			
Registration no.	01-2119457558-25			
Concentration	>= 10	<	20	%
Classification (Regulation (EC) No. 1272/2008)				
	Flam. Liq. 2		H225	
	Eye Irrit. 2		H319	
	STOT SE 3		H336	

2-Propenoic acid, reaction products with pentaerythritol

CAS No.	1245638-61-2			
EINECS no.	629-850-6			
Registration no.	01-2119490003-49			
Concentration	>= 3	<	10	%
Classification (Regulation (EC) No. 1272/2008)				
	Acute Tox. 4		H302	
	Skin Irrit. 2		H315	
	Eye Dam. 1		H318	
	Skin Sens. 1		H317	
	Aquatic Chronic 2		H411	

ATE oral 540 mg/kg

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

CAS No.	75980-60-8			
EINECS no.	278-355-8			
Registration no.	01-2119972295-29			
Concentration	>= 3	<	10	%
Classification (Regulation (EC) No. 1272/2008)				
	Repr. 2		H361f	

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



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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.

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



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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

Exposure limit values

Methyl methacrylate monomer, stabilized

List	TRGS 900			
Type	AGW			
Value	210	mg/m ³	50	ppm(V)
Maximum limit value: 2(I) Pregnancy group: Y; Status: Jan 2006; Remarks: DFG				

Propan-2-ol

List	TRGS 900			
Value	500	mg/m ³	200	ppm(V)
Maximum limit value: 2(II) Pregnancy group: Y; Status: 01/2006; Remarks: DGF				

Biological limit values

Propan-2-ol

Value	25	mg/l		
Parameter	Acetone			
Testing material	Whole blood (B)			
Test date	End of exposure or end of shift (b)			

Propan-2-ol

Value	25	mg/l		
Parameter	Acetone			
Testing material	Urine (U)			
Test date	End of exposure or end of shift (b)			



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Other information

Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)**Methyl methacrylate monomer, stabilized**

Reference substance	Methyl methacrylate monomer, stabilized	
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	208	mg/m ³
Type of value	Methyl methacrylate monomer, stabilized Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	13,7	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Concentration	416	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	0,0015	mg/cm ²
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	8,2	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	8,2	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	inhalative	
Concentration	208	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	inhalative	
Mode of action	Systemic effects	
Concentration	74,3	mg/m ³

Propan-2-ol

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	888	mg/kg/d

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	500	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	319	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	89	mg/m ³

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	26	mg/kg/d

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



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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

Predicted No Effect Concentration (PNEC)**Methyl methacrylate monomer, stabilized**

Reference substance	Methyl methacrylate monomer, stabilized	
Type of value	PNEC	
Type	Freshwater	
Concentration	0,94	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,094	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	1,48	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	10,2	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l
Type of value	PNEC	
Type	Man via the environment	
Concentration	8,2	mg/kg/d
Type of value	PNEC	
Type	Marine sediment	
Concentration	1,2	mg/kg

Propan-2-ol

Type of value	PNEC	
Type	Freshwater	
Concentration	140,9	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	140,9	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	



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Concentration	140,9	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	2251	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	552	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	28	mg/kg
Type of value	PNEC	
Type	Secondary poisoning	
Concentration	160	mg/kg

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-Propenoic acid, reaction products with pentaerythritol

Type of value	PNEC	
Type	Freshwater	
Concentration	0,0032	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,0003	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,032	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,151	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,0151	mg/kg



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Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Concentration	10		mg/l
Type of value	PNEC		
Type	Soil		
Concentration	0,0283		mg/kg

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 Butyl rubber

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	colourless	
Odour	characteristic	
Melting point		
Remarks	not determined	
Freezing point		
Remarks	not determined	
Boiling point or initial boiling point and boiling range		
Value	101	°C
Flammability		
evaluation	Not applicable	
Upper and lower explosive limits		
Lower explosion limit	2,1	%(V)
Upper explosion limit	12,5	%(V)



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Flash point

Value	10	°C
Method	closed cup	

Ignition temperature

Value	430	°C
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Decomposition temperature

Remarks	not determined
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Self Accelerating Decomposition / Polymerization Temperature (SADT/SAPT)

Value	> 50	°C
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pH value

Remarks	not determined
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Viscosity**dynamic**

Remarks	not determined
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Solubility(ies)

Remarks	not determined
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Partition coefficient n-octanol/water (log value)

Remarks	not determined
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Vapour pressure

Value	47	hPa
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Density and/or relative density

Value	0,98	g/m ³
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Relative vapour density

Remarks	not determined
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9.2. Other information**Odour threshold**

Remarks	not determined
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Evaporation rate (ether = 1) :

Remarks	not determined
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Solubility in water

Remarks	virtually insoluble
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Explosive properties

evaluation	not determined
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Oxidising properties

Remarks	not determined
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Solvent content

Value	0,0	%
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Other information

None known

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

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



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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

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 (Regulation (EC) No. 1272/2008)		

Acute oral toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	rat		
LD50	appr.	7900	mg/kg

Propan-2-ol

Species	rat		
		5840	mg/kg
Method	OECD 401		

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

Species	rat		
LD50	>	5000	mg/kg
Method	OECD 401		

2-Propanoic acid, reaction products with pentaerythritol

Species	rat		
LD50		540	mg/kg
Method	OECD 401		

Acute dermal toxicity

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

Acute dermal toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	rabbit		
LD50	>	5000	mg/kg
Method	OECD 402		

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

Species	rat		
LD50	>	2000	mg/kg
Method	OECD 402		

2-Propanoic acid, reaction products with pentaerythritol

Species	rabbit		
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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)**Methyl methacrylate monomer, stabilized**

Species	rat		
LC50		29,8	mg/l
Duration of exposure		4	h
Administration/Form	Vapors		

Propan-2-ol

Species	rat		
	>	10000	ppm(V)
Duration of exposure		6	h
Administration/Form	Vapors		
Method	OECD 403		

Skin corrosion/irritation

evaluation	irritant
Remarks	The classification criteria are met.

Skin corrosion/irritation (Components)**Methyl methacrylate monomer, stabilized**

Species	Human
evaluation	irritant

2-Propenoic acid, reaction products with pentaerythritol

Species	rabbit
evaluation	irritant
Method	OECD 404

Serious eye damage/irritation

evaluation	corrosive
Remarks	The classification criteria are met.

Serious eye damage/irritation (Components)**Propan-2-ol**

Species	rabbit
evaluation	irritant
Method	OECD 405

2-Propenoic acid, reaction products with pentaerythritol

Species	rabbit
evaluation	corrosive
Method	OECD 405

Sensitization

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

Sensitization (Components)**Methyl methacrylate monomer, stabilized**

Route of exposure	dermal
Species	mouse
evaluation	sensitizing
Method	OECD 429

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

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

2-Propenoic acid, reaction products with pentaerythritol

Species guinea pig
 evaluation non-sensitizing
 Method OECD 406

2-Propenoic acid, reaction products with pentaerythritol

Species Human
 evaluation Possible sensitization potential with human beings.

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

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

Reproductive toxicity

evaluation Suspected of damaging 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 The classification criteria are met.
 evaluation May cause respiratory irritation.

Repeated exposure

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

Specific Target Organ Toxicity (STOT) (Components)**Methyl methacrylate monomer, stabilized****Single exposure**

evaluation May cause respiratory irritation.
 Route of exposure inhalative

Propan-2-ol**Single exposure**

evaluation May cause drowsiness or dizziness.
 Organs: Nervous system

Aspiration hazard

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

Aspiration hazard (Components)**Propan-2-ol**

Harmful: may cause lung damage if swallowed.

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.



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Other information

No toxicological data are available.

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

not determined

Fish toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	rainbow trout (<i>Oncorhynchus mykiss</i>)		
LC50	> 79		mg/l
Duration of exposure	96	h	

Methyl methacrylate monomer, stabilized

Species	zebra fish (<i>Brachydanio rerio</i>)		
NOEC	9,4		mg/l
Duration of exposure	35	d	
Method	OECD 210		

Propan-2-ol

Species	Fathead minnow (<i>Pimephales promelas</i>)		
LC50	10000		mg/l
Duration of exposure	96	h	
Method	OECD 203		

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

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

2-Propenoic acid, reaction products with pentaerythritol

Species	carp (<i>Cyprinus carpio</i>)		
LC50	3,2		mg/l
Duration of exposure	96	h	
Method	OECD 203		

Daphnia toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	Daphnia magna		
EC50	69		mg/l
Duration of exposure	48	h	

Methyl methacrylate monomer, stabilized

Species	Daphnia magna		
NOEC	37		mg/l
Duration of exposure	21	d	
Method	OECD 211		

Propan-2-ol

Species	Daphnia magna		
LC50	> 10000		mg/l
Duration of exposure	24	h	
Method	OECD 202		

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

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

2-Propenoic acid, reaction products with pentaerythritol

Species	Daphnia magna		
EC50	13		mg/l
Duration of exposure	48	h	
Method	OECD 202		

Algae toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	Pseudokirchneriella subcapitata		
EC50	> 110		mg/l
Duration of exposure	72	h	
Method	OECD 201		

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

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

2-Propenoic acid, reaction products with pentaerythritol

Species	Pseudokirchneriella subcapitata		
EL50	33		mg/l
Duration of exposure	96	h	
Method	OECD 201		

Bacteria toxicity (Components)**Methyl methacrylate monomer, stabilized**

Species	activated sludge		
NOEC	> 100		mg/l
Duration of exposure	14	d	

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

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

2-Propenoic acid, reaction products with pentaerythritol

Species	activated sludge		
EC50	> 100		mg/l
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-Propenoic acid, reaction products with pentaerythritol

Value	6	to	14	%
Duration of test	28	d		
evaluation	not readily degradable			



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Ready degradability (Components)**Methyl methacrylate monomer, stabilized**

Value	94		%
Duration of test	14	d	

Propan-2-ol

Value	53		%
Duration of test	5	d	

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)**Methyl methacrylate monomer, stabilized**

log Pow	1,38		
Temperature	20	°C	
Method	OECD 107		

Propan-2-ol

log Pow	0,05		
Temperature	25	°C	

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

log Pow	3,1		
Temperature	23	°C	

2-Propenoic acid, reaction products with pentaerythritol

log Pow	3,11		
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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)		

12.4. Mobility in soil**General information**

not determined

Mobility in soil (Components)**Propan-2-ol**

Mobile in soils

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

not determined

Results of PBT and vPvB assessment

The product contains no PBT substances
The product contains no vPvB substances.

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

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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.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	1247	1247	1247
14.2. UN proper shipping name	METHYL METHACRYLATE MONOMER, STABILIZED, Solution	METHYL METHACRYLATE MONOMER, STABILIZED, Solution	METHYL METHACRYLATE MONOMER, STABILIZED, Solution
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 l	1 l	
Transport category	2		
14.5. Environmental hazards	-		
Tunnel restriction code	D/E		

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SECTION 15: Regulatory information

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)

Flam. Liq. 2	H225	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361f	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

Hazard statements listed in Chapter 2/3

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 2/3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

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.