



Trade name: Mara® Shield 5 L UV-CBG

Version: 5 /

Date revised: 21.01.2015

Substance number: 362198006

Replaces Version: 4 / WORLD

Print date: 23.09.16

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

### **1.1. Product identifier**

Mara® Shield 5 L UV-CBG

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

#### **Use of the substance/preparation**

Roller Coating

### **1.3. Details of the supplier of the safety data sheet**

#### **Address**

Marabu GmbH & Co. KG  
Asperger Strasse 4  
71732 Tamm  
Germany  
Telephone no. +49-7141/691-0  
Fax no. +49-7141/691-147  
Information provided by / telephone Department product safety  
E-mail address of person responsible for this SDS PRSI@marabu.de

### **1.4. Emergency telephone number**

(+49) (0)621-60-43333

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

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

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

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1A	H317
STOT SE 3	H335
Aquatic Chronic 2	H411

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

##### **Hazard pictograms**



##### **Signal word**

Warning

##### **Hazard statements**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.



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H411 Toxic 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.  
 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.  
 P312 Call a POISON CENTER or doctor if you feel unwell.

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

contains Hexamethylene diacrylate;(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate;2-Phenoxyethyl acrylate;Trimethylolpropane ethoxylated, triacrylate

**2.3. Other hazards**

No special hazards have to be mentioned.

**SECTION 3: Composition/information on ingredients \*\*\*****3.2. Mixtures****Chemical characterization**

UV - curing liquid coating based on reactive acrylates

**Hazardous ingredients \*\*\*****(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate**

CAS No. 42978-66-5  
 EINECS no. 256-032-2  
 Registration no. 01-2119484613-34  
 Concentration >= 25 < 50 %

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

Eye Irrit. 2	H319
STOT SE 3	H335
Skin Irrit. 2	H315
Skin Sens. 1A	H317
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

STOT SE 3	H335	>= 10
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**Hexamethylene diacrylate**

CAS No. 13048-33-4  
 EINECS no. 235-921-9  
 Registration no. 01-2119484737-22  
 Concentration >= 10 < 25 %

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

Eye Irrit. 2	H319
Skin Irrit. 2	H315
Skin Sens. 1	H317
Aquatic Chronic 3	H412

**2-Phenoxyethyl acrylate**

CAS No. 48145-04-6  
 EINECS no. 256-360-6  
 Registration no. 01-2119980532-35  
 Concentration >= 10 < 25 %



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Classification (Regulation (EC) No. 1272/2008)  
 Skin Sens. 1A H317  
 Aquatic Chronic 2 H411

**Ethoxylated acrylated ester**

Concentration >= 10 < 25 %

Classification (Regulation (EC) No. 1272/2008)  
 Eye Irrit. 2 H319

**Trimethylolpropane ethoxylated, triacrylate**

CAS No. 28961-43-5  
 EINECS no. 500-066-5  
 Registration no. 01-2119489900-30  
 Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)  
 Eye Irrit. 2 H319  
 Skin Sens. 1 H317

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

**After inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

**After skin contact**

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. In case of accidental skin contact avoid concurrent exposure to the sun or other sources of UV light, which may increase the sensitivity of skin.

**After eye contact**

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**After ingestion**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

**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 / treatment**

Treat symptomatically

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Recommended: alcohol resistant foam, CO2-blanket, powders, water spray/mist, Not be used for safety



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reasons: water jet

## 5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); dense black smoke; Nitrogen oxides (NO<sub>x</sub>)

## 5.3. Advice for firefighters

### Special protective equipment for fire-fighting

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

### 6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Skin and eye contact constitutes the principal hazard. Persons with a history of skin sensitisation problems should not be employed in any process in which this mixture is used. Use only in well-ventilated areas. Isolate from sources of heat, sparks and open flame. Avoid skin and eye contact. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

#### Classification of fires / temperature class / Ignition group / Dust explosion class

Classification of fires	B (Combustible liquid substances)
Temperature class	T3

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Store in accordance with national regulation

#### Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

#### Further information on storage conditions

Observe label precautions. Store between 15 and 30 °C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.



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**7.3. Specific end use(s)**

Roller Coating

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Derived No/Minimal Effect Levels (DNEL/DMEL)**

**Trimethylolpropane ethoxylated, triacrylate**

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

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,5	mg/kg/d

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	0,5	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	4,9	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Industrial use	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,8	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Industrial use	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	16,2	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Professional use	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,48	mg/kg/d

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

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

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	1,4	mg/kg

**Hexamethylene diacrylate**

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	2,08	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	1,66	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	7,24	mg/m <sup>3</sup>

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	2,77	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	24,48	mg/m <sup>3</sup>

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Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 1,66 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 7,24 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure oral  
 Mode of action Systemic effects  
 Concentration 2,08 mg/kg/d

**(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate**

Type of value Derived No Effect Level (DNEL)  
 Reference group Industrial use  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 2,77 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Industrial use  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 24,48 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 1,66 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 7,24 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Professional use  
 Duration of exposure Long term  
 Route of exposure oral  
 Mode of action Systemic effects  
 Concentration 2,08 mg/kg/d



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**Hydroxycyclohexyl phenyl ketone**

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	3	mg/kg

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	21,16	mg/m <sup>3</sup>

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	1,5	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	5,22	mg/m <sup>3</sup>

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	1,5	mg/kg

**2-Phenoxyethyl acrylate**

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	10	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	77	mg/m <sup>3</sup>

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	





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Concentration 1,5 mg/kg/d

**Predicted No Effect Concentration (PNEC)**

**Trimethylolpropane ethoxylated, triacrylate**

Type of value	PNEC	
Type	Soil	
Concentration	0,00587	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,0082	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,00082	mg/kg
Type of value	PNEC	
Type	Freshwater	
Concentration	0,00195	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000195	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,0195	mg/l

**Hexamethylene diacrylate**

Type of value	PNEC	
Type	Soil	
Concentration	0,00397	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,0137	mg/kg
Type of value	PNEC	
Type	Freshwater	
Concentration	0,0015	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,00015	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	2,7	mg/l

**(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate**

Type of value	PNEC	
Type	Freshwater	

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Concentration	0,0073	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,00073	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,073	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	0,019	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,00243	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

**Hydroxycyclohexyl phenyl ketone**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,0144	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,00144	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,144	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	0,186	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,0186	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,0284	mg/kg

**2-Phenoxyethyl acrylate**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,002	mg/l
Type of value	PNEC	



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Type	Saltwater	
Concentration	0,0002	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,0121	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	0,006	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,004	mg/kg
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,04	mg/kg

## 8.2. Exposure controls

### Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Respiratory protection

In situations where misting or flying may occur use appropriate certified respirators.

### Hand protection

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

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness > 0,5 mm

Breakthrough time > 30 min

PVC or rubber gloves are not recommended.

The breakthrough time must be greater than the end use time of the product.

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.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

### Eye protection

Use safety eyewear designed to protect against splash of liquids.

### Body protection

Personnel should wear protective clothing.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Form</b>	liquid, viscous
<b>Colour</b>	transparent
<b>Odour</b>	of acrylic monomers
<b>Odour threshold</b>	



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Remarks No data available

**pH value**

Remarks Not applicable

**Melting point**

Remarks not determined

**Freezing point**

Remarks not determined

**Initial boiling point and boiling range**

Value appr. 132 °C

Pressure 1.013 hPa

Source Literature value

**Flash point**

Value &gt; 100 °C

Method ASTM D 6450 (CCCFP)

**Evaporation rate (ether = 1) :**

Remarks not determined

**Flammability (solid, gas)**

Not applicable

**Upper/lower flammability or explosive limits**

Remarks not determined

**Vapour pressure**

Value &lt; 0,1 hPa

Temperature 20 °C

Method calculated

**Vapour density**

Remarks not determined

**Density**Value 1,050 g/cm<sup>3</sup>

Temperature 20 °C

Method DIN EN ISO 2811

**Solubility in water**

Remarks partially miscible

**Partition coefficient: n-octanol/water**

Remarks Not applicable

**Ignition temperature**

Value appr. 214 °C

Source Literature value

**Viscosity**

Remarks

Remarks not determined

**Efflux time**

Value &gt; 150 s

Method DIN 53211 4 mm

**Explosive properties**

evaluation no

**Oxidising properties**

evaluation None known



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## 9.2. Other information

### Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

This mixture contains materials which are unstable under the following conditions: exposure to heat (>50°C), strong UV sources.

### 10.3. Possibility of hazardous reactions

Keep away from free radical initiators, peroxides, strong alkalis or reactive metals.

### 10.4. Conditions to avoid

These could cause the product to polymerise exothermically. Unintentional contact with them should be avoided. When exposed to high temperatures may produce hazardous decomposition products.

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute oral toxicity (Components)

##### 2-Phenoxyethyl acrylate

Species	rat	
LD50	> 5000	mg/kg
Method	OECD 401	

##### (1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Species	rat	
LD50	6800	mg/kg

#### Sensitization (Components)

##### Hexamethylene diacrylate

Species	guinea pig
evaluation	sensitizing
Method	OECD 406

##### (1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Route of exposure	dermal
Species	guinea pig
evaluation	sensitizing
Method	OECD 406

##### (1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Route of exposure	dermal
Species	mouse
evaluation	sensitizing
Method	OECD 429

#### Aspiration hazard

No special hazards have to be mentioned.



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### Experience in practice

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms such as redness, blistering, dermatitis, etc. Cases of allergic skin reactions have been observed. The liquid splashed in the eyes may cause irritation. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects.

### Other information

There are no data available on the mixture itself.

The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### General information

There are no data available on the mixture itself. Do not allow to enter drains or water courses. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

#### Fish toxicity (Components)

##### (1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Species	golden orfe (Leuciscus idus)			
LC50	1	to	10	mg/l
Duration of exposure	96	h		
Method	DIN 38412 / Part 15			

##### 2-Phenoxyethyl acrylate

LC50	10			mg/l
Duration of exposure	24	h		
Method	OECD 203			

##### Hexamethylene diacrylate

Species	golden orfe (Leuciscus idus)			
EC50	1,6	to	10	mg/l
Duration of exposure	96	h		

#### Daphnia toxicity (Components)

##### (1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Species	Daphnia magna			
LC50	10	to	100	mg/l
Duration of exposure	48	h		
Method	OECD 202			

##### 2-Phenoxyethyl acrylate

Species	Daphnia magna			
EC50	1,21			mg/l
Duration of exposure	48	h		
Method	OECD 202			

##### 2-Phenoxyethyl acrylate

Species	Daphnia magna			
EC10	> 0,1			mg/l
Duration of exposure	21	Days		
Method	OECD 211			

##### Hexamethylene diacrylate

Species	Daphnia magna			
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EC50	2,6		mg/l
Duration of exposure	48	h	

**Algae toxicity (Components)****(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate**

Species	Scenedesmus subspicatus		
EC50	10	to	100 mg/l
Duration of exposure	72	h	
Method	OECD 201		

**2-Phenoxyethyl acrylate**

Species	Desmodesmus		
	4,4		mg/l
Duration of exposure	72	h	
Method	ISO 8692		

**2-Phenoxyethyl acrylate**

Species	Desmodesmus		
EC10	0,71		mg/l
Duration of exposure	72	h	

**Hexamethylene diacrylate**

Species	Desmodesmus		
EC50	1,5		mg/l
Duration of exposure	72	h	

**Hexamethylene diacrylate**

Species	Desmodesmus		
NOEC	0,5		mg/l
Duration of exposure	72	h	

**Bacteria toxicity (Components)****(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate**

Species	activated sludge		
EC20	>	1000	mg/l
Duration of exposure	0,5	h	
Method	OECD 209		

**2-Phenoxyethyl acrylate**

Species	activated sludge		
EC50	177		mg/l
Duration of exposure	3	h	
Method	OECD 209		

**12.2. Persistence and degradability****General information**

No data available

**Biodegradability (Components)****2-Phenoxyethyl acrylate**

Value	22,3		%
Duration of test	28	Days	
Method	OECD 301 D		

**12.3. Bioaccumulative potential****General information**

There are no data available on the mixture itself.

**Partition coefficient: n-octanol/water**

Remarks Not applicable

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



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**2-Phenoxyethyl acrylate**

log Pow	2,58	
Temperature	25	°C
Method	OECD 117	

**12.4. Mobility in soil****General information**

There are no data available on the mixture itself.

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

There are no data available on the mixture itself.

**12.6. Other adverse effects****General information**

There are no data available on the mixture itself.

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

Do not allow to enter drains or water courses.

Wastes and emptied containers should be classified in accordance with relevant national regulation.

The European Waste Catalogue classification of this product, when disposed of as waste is

EWC waste code 08 03 12\* waste ink containing dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

**Disposal recommendations for packaging**

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste (waste code number 150110).

**SECTION 14: Transport information****Land transport ADR/RID****14.1. UN number**

UN 3082

**14.2. UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

((1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate)

**14.3. Transport hazard class(es)**

Class 9

Label 9

**14.4. Packing group**

Packing group III

Transport category 4

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS

Tunnel restriction code E

**Marine transport IMDG/GGVSee****14.1. UN number**

UN 3082

**14.2. UN proper shipping name**





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ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 ((1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate)

**14.3. Transport hazard class(es)**

Class 9

**14.4. Packing group**

Packing group III

**14.5. Environmental hazards**

Marine Pollutant

**Air transport ICAO/IATA**

**14.1. UN number**

UN 3082

**14.2. UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 ((1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate)

**14.3. Transport hazard class(es)**

Class 9

**14.4. Packing group**

Packing group III

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS

**Information for all modes of transport**

**14.6. Special precautions for user**

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Other information**

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

no

**SECTION 15: Regulatory information**

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

**Other information**

The product does not contain substances of very high concern (SVHC).

**Other information**

All components are contained in the TSCA inventory or exempted.

All components are contained in the AICS inventory.

All components are contained in the IECSC inventory.

All components are contained in the NZIOC inventory.

All components are contained in the ECL inventory.

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Hazard statements listed in Chapter 3**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.



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### CLP categories listed in Chapter 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
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
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.

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.