

**TERRAGLOSS UV Matt Varnish G 8/606 VK-045**

Version 4.0 SDS\_GB

Revision Date 22.01.2020

Print Date 14.07.2020

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : TERRAGLOSS UV Matt Varnish G 8/606 VK-045

**1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the Sub-  
stance/Mixture : Printing and reproduction of recorded media  
Rolling  
The product is intended for professional use.Recommended restrictions  
on use : For industrial use only.**1.3 Details of the supplier of the safety data sheet**Company : ACTEGA Terra GmbH  
Industriestraße 12  
31275 LehrteTelephone : +49513250090  
Telefax : +4951325009110

E-mail address : qum.actega.terra@altana.com

**1.4 Emergency telephone number**

+44 1235 239670

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**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	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.
Precautionary statements	:	<b>Prevention:</b> P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. <b>Response:</b> P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention.

Hazardous components which must be listed on the label:

- 42978-66-5 Tripropylenglycoldiacrylate
- 2156-97-0 monoalkylor monoaryl or monoalkylaryl esters of acrylic acid
- 21643-42-5 tetradecyl acrylate
- 52408-84-1 Glycerol, propoxylated, esters with acrylic acid
- 111497-86-0 2-Propenoic acid, 1,1'-[(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]] ester, reaction products with diethylamine
- 15625-89-5 2,2-bis(acryloyloxymethyl)butyl acrylate
- 66492-51-1 (5-ethyl-1,3-dioxan-5-yl)methyl acrylate
- 57472-68-1 oxybis(methyl-2,1-ethanediyl) diacrylate
- 162627-17-0 Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

### 2.3 Other hazards

None known.

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**SECTION 3: Composition/information on ingredients**
**3.2 Mixtures**

Chemical nature : UV-hardened system

**Hazardous components**

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Tripropylenglycoldiacrylate	42978-66-5 256-032-2  01-2119484613-34	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411	<b>&gt;= 20 - &lt; 25</b>
monoalkyl or monoaryl or monoalkylaryl esters of acrylic acid	2156-97-0 218-463-4 /	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411	<b>&gt;= 7 - &lt; 10</b>
tetradecyl acrylate	21643-42-5 244-491-1 /	Skin Irrit. 2; H315 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411	<b>&gt;= 7 - &lt; 10</b>
Glycerol, propoxylated, esters with acrylic acid	52408-84-1  01-2119487948-12	Eye Irrit. 2; H319 Skin Sens. 1; H317	<b>&gt;= 5 - &lt; 7</b>
1-Propanone, 2-hydroxy-2-methyl-1-phenyl-	7473-98-5	Acute Tox. 4; H302 Aquatic Chronic 3; H412	<b>&gt;= 3 - &lt; 5</b>
methyl 2-benzoylbenzoate	606-28-0 210-112-3	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<b>&gt;= 3 - &lt; 5</b>
2-Propenoic acid, 1,1'-[(1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)]] ester, reaction products with diethylamine	111497-86-0	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317	<b>&gt;= 3 - &lt; 5</b>
2,2-bis(acryloyloxymethyl)butyl acrylate	15625-89-5 239-701-3  01-2119489896-11	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<b>&gt;= 1 - &lt; 2,5</b>
zinc oxide	1314-13-2 215-222-5  01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<b>&gt;= 1 - &lt; 2,5</b>

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(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	66492-51-1 266-380-7	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	<b>&gt;= 0,5 - &lt; 1</b>
oxybis(methyl-2,1-ethanediyl) diacrylate	57472-68-1 260-754-3  01-2119484629-21	Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317	<b>&gt;= 0,1 - &lt; 0,25</b>
Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	162627-17-0	Skin Sens. 1; H317	<b>&gt;= 0,1 - &lt; 0,25</b>
<b>Substances with a workplace exposure limit :</b>			
kaolin	1332-58-7 310-194-1		<b>&gt;= 12,5 - &lt; 20</b>
Talc (Mg3H2(SiO3)4)	14807-96-6 238-877-9		<b>&gt;= 3 - &lt; 5</b>
Silicon dioxide	7631-86-9 231-545-4  01-2119379499-16		<b>&gt;= 1 - &lt; 3</b>

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.  
Call a physician if symptoms occur.  
Never give anything by mouth to an unconscious person.
- If inhaled : Move to fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.  
Do not remove solidified product.  
If skin irritation persists, call a physician.  
Wash off immediately with plenty of water.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes  
and consult a physician.
- If swallowed : Rinse mouth with water.  
Do not induce vomiting. Dilute with 1-2 glasses of water. Get  
medical aid.

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

None known.

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

Treatment : No information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.  
Do not allow run-off from fire fighting to enter drains or water courses.  
Can polymerise exothermically if heated, exposed to air, sunlight or by addition of free radical initiators.

**5.3 Advice for firefighters**

Specific extinguishing methods : Use water spray to cool unopened containers.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.

**6.2 Environmental precautions**

Environmental precautions : Should not be released into the environment.  
Do not allow contact with soil, surface or ground water.  
Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Flush with water.  
Pick up and transfer to properly labelled containers.

**6.4 Reference to other sections**

For personal protection see section 8., For disposal considerations see section 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : Provide appropriate exhaust ventilation at machinery.  
Wear personal protective equipment.  
Persons with a history of skin sensitisation problems should

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not be employed in any process in which this product is used. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from food and drink.

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

Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

Other data : Protect from frost, heat and sunlight. No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
kaolin	1332-58-7	TWA (Respirable dust)	2 mg/m <sup>3</sup>	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			

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		TWA (Respirable dust)	0,1 mg/m3	2004/37/EC
Further information	Carcinogens or mutagens			
Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )	14807-96-6	TWA (Respirable dust)	1 mg/m3	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, Talc is defined as the mineral talc together with other hydrous phyllosilicates including chlorite and carbonate materials which occur with it, but excluding amphibole asbestos and crystalline silica., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.</p>			
		TWA (Respirable dust)	0,1 mg/m3	2004/37/EC
Further information	Carcinogens or mutagens			
Silicon dioxide	7631-86-9	TWA (inhalable dust)	6 mg/m3 (Silica)	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.</p>			



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		TWA (Respirable dust)	2,4 mg/m <sup>3</sup> (Silica)	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.</p>			
		TWA (Respirable dust)	0,1 mg/m <sup>3</sup>	2004/37/EC
Further information	Carcinogens or mutagens			

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Exposure routes	Potential health effects	Value
Tripropylenglycoldiacrylate	Industrial use	Skin contact	Long-term systemic effects	2,77 mg/kg
	Industrial use	Inhalation	Long-term systemic effects	24,48 mg/m <sup>3</sup>
	Professional use	Skin contact	Long-term systemic effects	1,66 mg/kg
	Professional use	Inhalation	Long-term systemic effects	7,24 mg/m <sup>3</sup>
Silicon dioxide	Professional use	Ingestion	Long-term systemic effects	2,08 mg/kg
	Workers	Inhalation	Long-term systemic effects	4 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term systemic effects	16,2 mg/m <sup>3</sup>
		Skin contact	Long-term systemic effects	0,8 mg/kg
2,2-bis(acryloyloxymethyl) butyl acrylate	Consumers	Inhalation	Long-term systemic effects	4,9 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	0,48 mg/kg
	Consumers	Ingestion	Long-term systemic effects	1,39 mg/kg
	oxybis(methyl-2,1-ethanediyl) diacrylate	Industrial use	Dermal	Long-term systemic effects
Industrial use		Inhalation	Long-term systemic	24,48 mg/m <sup>3</sup>



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			effects	
	Professional use	Dermal	Long-term systemic effects	1,66 mg/kg
	Professional use	Inhalation	Long-term systemic effects	7,24 mg/m <sup>3</sup>
	Professional use	Oral	Long-term systemic effects	2,08 mg/kg

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Tripropylenglycoldiacrylate	Fresh water	0,0073 mg/l
	Marine water	0,00073 mg/l
	Intermittent releases	0,073 mg/l
	Fresh water sediment	0,019 mg/kg
	Soil	0,00243 mg/kg
2,2-bis(acryloyloxymethyl)butyl acrylate	Sewage treatment plant	100 mg/l
	Fresh water	0,00147 mg/l
	Marine water	0,000147 mg/l
	Fresh water sediment	0,0062 mg/kg
	Marine sediment	0,00062 mg/kg
oxybis(methyl-2,1-ethanediyl) diacrylate	Sewage treatment plant	6,25 mg/l
	Soil	0,0043 mg/kg
	Intermittent releases	0,0147 mg/l
	Oral	5,6 mg/kg
	Fresh water	0,0034 mg/l
oxybis(methyl-2,1-ethanediyl) diacrylate	Marine water	0,00034 mg/l
	Intermittent releases	0,034 mg/l
	Fresh water sediment	0,00884 mg/kg
	Soil	0,0013 mg/kg
	Sewage treatment plant	100 mg/l
Marine sediment	0,000884 mg/kg	

## 8.2 Exposure controls

### Engineering measures

Local exhaust

### Personal protective equipment

Eye protection : Tightly fitting safety goggles

#### Hand protection

Material : Viton (R)  
 Glove thickness : 0,4 mm  
 Glove length : Gauntlets  
 Directive : Equipment should conform to EN 374  
 Protective index : Class 4

Remarks : Do not wear PVC gloves, as PVC absorbs acrylates. Preventive skin protection

Skin and body protection : Work uniform or laboratory coat.

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Follow the skin protection plan.

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General advice : Should not be released into the environment.  
Do not allow contact with soil, surface or ground water.  
Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

### SECTION 9: Physical and chemical properties

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

Appearance : liquid

Colour : violet

Odour : mild, characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point/boiling range : not determined

Flash point : Greater than 100 °C  
Method: ASTM D 93, Pensky-Martens closed cup

Evaporation rate : No data available

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : < 0,1 hPa

Density : ca. 1,171 g/cm<sup>3</sup> (20 °C)  
Method: DIN 53217

Solubility(ies)  
Water solubility : insoluble

Ignition temperature : not auto-flammable

Flow time : ca. 45 s at 20 °C  
Cross section: 4 mm  
Method: DIN 53211

#### 9.2 Other information

No data available

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

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**10.2 Chemical stability**

Stable under normal conditions.

Polymerisation occurs when exposed to white light, ultraviolet light or heat.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Violent polymerisation can occur.

**10.4 Conditions to avoid**Conditions to avoid : Protect from frost, heat and sunlight.  
Extremes of temperature and direct sunlight.**10.5 Incompatible materials**Materials to avoid : Free radical initiators  
Strong oxidizing agents**10.6 Hazardous decomposition products**

No decomposition if used as directed.

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**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Product:**Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg  
Method: Calculation method**Components:****Tripropylenglycoldiacrylate:**Acute oral toxicity : LD50 (Rat, female): > 2.000 mg/kg  
Method: OECD Test Guideline 423  
GLP: yesAcute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402**2,2-bis(acryloyloxymethyl)butyl acrylate:**

Acute oral toxicity : LD50 (Rat): &gt; 5.000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): &gt; 5.000 mg/kg

**oxybis(methyl-2,1-ethanediyl) diacrylate:**Acute oral toxicity : LD50 (Rat): 3.530 mg/kg  
Method: OECD Test Guideline 401  
GLP: noAcute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes**Silicon dioxide:**Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg  
Method: OECD Test Guideline 401

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Acute inhalation toxicity : LC50 (Rat, male and female): 58,8 mg/l  
Exposure time: 4 h  
Method: OECD Test Guideline 403  
GLP: yes

### Skin corrosion/irritation

#### Components:

#### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Species: Rabbit  
Result: Skin irritation

Remarks: May irritate skin.  
May cause skin irritation and/or dermatitis.

#### **oxybis(methyl-2,1-ethanediyl) diacrylate:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: Skin irritation  
GLP: no

### Serious eye damage/eye irritation

#### Components:

#### **Tripropylenglycoldiacrylate:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Eye irritation  
GLP: yes

#### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Species: Rabbit  
Method: Draize Test  
Result: Eye irritation

Remarks: May cause irreversible eye damage.

#### **oxybis(methyl-2,1-ethanediyl) diacrylate:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Irreversible effects on the eye  
GLP: yes

### Respiratory or skin sensitisation

#### Product:

Remarks: May cause sensitisation of susceptible persons by skin contact.

#### Components:

#### **Tripropylenglycoldiacrylate:**

Test Type: Mouse Local Lymph Node assay (LLNA)  
Species: Mouse  
Method: OECD Test Guideline 429  
Result: May cause sensitisation by skin contact.  
GLP: yes

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### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Test Type: Maximisation Test

Exposure routes: Dermal

Species: Guinea pig

Result: May cause sensitisation by skin contact.

Remarks: Causes sensitisation.

### **oxybis(methyl-2,1-ethanediyl) diacrylate:**

Test Type: Mouse Local Lymph Node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: Causes sensitisation.

GLP: yes

### **Further information**

#### **Product:**

Remarks: No data is available on the product itself.

#### **Components:**

### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Remarks: No data available

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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

#### **Components:**

### **Tripropylenglycoldiacrylate:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 4,6 - < 10 mg/l  
Exposure time: 96 h  
Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 89 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Scenedesmus subspicatus): 65,9 mg/l  
Exposure time: 72 h

### **methyl 2-benzoylbenzoate:**

M-Factor (Short-term (acute) aquatic hazard) : 1

M-Factor (Long-term (chronic) aquatic hazard) : 1

### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

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- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 1,47 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: Directive 67/548/EEC, Annex V, C.1.
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 19,9 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: Directive 67/548/EEC, Annex V, C.2.
- Toxicity to algae : ErC50 (Scenedesmus subspicatus): 4,86 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: Directive 67/548/EEC, Annex V, C.3.

### zinc oxide:

- M-Factor (Short-term (acute) aquatic hazard) : 1
- M-Factor (Long-term (chronic) aquatic hazard) : 1

### oxybis(methyl-2,1-ethanediyl) diacrylate:

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna Straus): 10 - 100 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: Regulation (EC) No. 440/2008, Annex, C.2  
GLP: no
- Toxicity to algae : (Scenedesmus subspicatus): 10 - 100 mg/l  
Exposure time: 72 h  
Test Type: static test  
GLP: no

## 12.2 Persistence and degradability

### Components:

#### **Tripropylenglycoldiacrylate:**

- Biodegradability : Result: Partially biodegradable.  
Method: OECD Test Guideline 301B  
GLP: yes

#### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

- Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301B  
GLP: yes

#### **oxybis(methyl-2,1-ethanediyl) diacrylate:**

- Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301A  
GLP: yes

## 12.3 Bioaccumulative potential

### Components:

#### **Tripropylenglycoldiacrylate:**

- Partition coefficient: n- : log Pow: 2 (25 °C)

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octanol/water

### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Partition coefficient: n-octanol/water : log Pow: 0,67 (23 °C)  
pH: 7,5  
Method: OECD Test Guideline 107

### **oxybis(methyl-2,1-ethanediyl) diacrylate:**

Partition coefficient: n-octanol/water : log Pow: 0,01 - 0,39 (24 °C)  
pH: 7  
Method: Regulation (EC) No. 440/2008, Annex, A.8  
GLP: yes

## 12.4 Mobility in soil

### **Components:**

### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Distribution among environmental compartments : Koc: log Koc: 2,2  
Method: OECD Test Guideline 121

## 12.5 Results of PBT and vPvB assessment

### **Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

## 12.6 Other adverse effects

### **Product:**

Additional ecological information : There is no data available for this product.

### **Components:**

### **2,2-bis(acryloyloxymethyl)butyl acrylate:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.  
The product should not be allowed to enter drains, water courses or the soil.  
Do not mix waste streams during collection.  
Dispose of as hazardous waste in compliance with local and national regulations.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.  
The following Waste Codes are only suggestions:  
waste paint and varnish containing organic solvents or other dangerous substances



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Contaminated packaging : Empty remaining contents.  
 Packaging that is not properly emptied must be disposed of as the unused product.  
 Do not re-use empty containers.  
 Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**SECTION 14: Transport information**
**14.1 UN number**

**ADR/RID** : UN 3082  
**IMDG** : UN 3082  
**IATA** : UN 3082

**14.2 UN proper shipping name**

**ADR/RID** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (Methyl 2-benzoylbenzoate, Tripropylene glycol diacrylate)  
**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (Methyl 2-benzoylbenzoate, Tripropylene glycol diacrylate)  
 Marine Pollutant (Methyl 2-benzoylbenzoate, Tripropylene glycol diacrylate)  
**IATA** : Environmentally hazardous substance, liquid, n.o.s.  
 (Methyl 2-benzoylbenzoate, Tripropylene glycol diacrylate)

**14.3 Transport hazard class(es)**

**ADR/RID** : 9  
**IMDG** : 9  
**IATA** : 9

**14.4 Packing group**

**ADR/RID**  
 Packing group : III  
 Classification Code : M6  
 Hazard Identification Number : 90  
 Labels : 9  
 Tunnel restriction code : E  
**IMDG**  
 Packing group : III  
 Labels : 9  
 EmS Code : F-A, S-F  
 Remarks : IMDG Code segregation group - none

**IATA (Cargo)**

Packing instruction (cargo aircraft) : 964  
 Packing instruction (LQ) : Y964  
 Packing group : III  
 Labels : Class 9 - Miscellaneous dangerous substances and articles

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### IATA (Passenger)

Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : Class 9 - Miscellaneous dangerous substances and articles

### 14.5 Environmental hazards

#### ADR/RID

Environmentally hazardous : yes

#### IMDG

Marine pollutant : yes

#### IATA (Passenger)

Marine pollutant : yes

#### IATA (Cargo)

Marine pollutant : yes

### 14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : naphtha (petroleum)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t

E1

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)  
Volatile organic compounds (VOC) content: 0,13 %, 1,48 g/l  
Remarks: VOC content excluding water

### 15.2 Chemical safety assessment

Not applicable

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**SECTION 16: Other information**
**Full text of H-Statements**

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.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

**Full text of other abbreviations**

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT SE	:	Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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### Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.  
Sections, highlighted in grey, indicates changes towards the previous version.  
The evaluation of this mixture for the purpose of classification and labeling is based on calculations and bridging principles (essentially similar mixtures, batch analogy).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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.