

## Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

Initial preparation date: 10.28.2019

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### Surgical Guide Resin

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

##### 1.1 Product identifier

**Product Name:** Surgical Guide Resin

**Product code:** FLSGAM01

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

**Relevant identified uses:** For use in Formlabs SLA printers

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

##### 1.3 Details of the manufacturer/supplier of the safety data sheet

**Manufacturer:**

**United States**

Formlabs Ohio, Inc  
27800 Lemoyne Rd.  
Suite O Millbury, Ohio 43447  
419-837-9783  
sds@formlabs.com

**Supplier:**

**Germany**

Formlabs GmbH  
Nalepastr. 18  
Berlin, Brandenburg 12459  
+49 30 555 795 880

##### 1.4 Emergency telephone number:

1-800-424-9300 (24 Hours)

#### SECTION 2: Hazard(s) identification

##### 2.1 Classification of the substance or mixture:

**Classification according to Regulation (EC) No. 1272/2008 (CLP):**

Skin irritation, category 2

Skin sensitization, category 1

Chronic aquatic hazard, category 2

**Hazard-determining components of labeling:**

2-hydroxyethyl methacrylate

Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

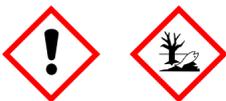
Urethane Dimethacrylate

**Additional Information:** None

##### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

**Hazard pictograms:**



**Signal word:** Warning

**Hazard statements:**

H315 Causes skin irritation

H319 Causes serious eye irritation

H317 May cause an allergic skin reaction

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H411 Toxic to aquatic life with long lasting effects

### Precautionary statements:

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P273 Avoid release to the environment

P302+P352 IF ON SKIN: Wash with plenty of soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P362 Take off contaminated clothing

P333+P313 If skin irritation or rash occurs: Get medical advice/attention

P363 Wash contaminated clothing before reuse

P391 Collect spillage

P501 Dispose of contents/container in accordance with local/regional/national regulations

2.3 Other hazards: None known

## SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

| Identification  | REACH Registration No. | Name   | Classification according to Regulation (EC) No. 1272/2008 (CLP) | Weight % |
|---|------------------------|--|---|----------|
| CAS number:<br>868-77-9<br>EC number:<br>212-782-2    | -                      | 2-hydroxyethyl methacrylate                        | Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319 | 25-45    |
| CAS number:<br>162881-26-7<br>EC number:<br>423-340-5 | -                      | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Skin Sens. 1; H317<br>Aquatic Chronic 4;<br>H413                | 1-2      |
| CAS number:<br>72869-86-4<br>EC number:<br>276-957-5  | -                      | Urethane Dimethacrylate                            | Skin Sens. 1; H317  | 55-75    |

Additional information: None

Full Text of H and EUH statements: See section 16

## SECTION 4: First aid measures

4.1 Description of first aid measures

### General notes:

Show this Safety Data Sheet to the doctor in attendance.

### Following inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

### Following skin contact:

Wash off immediately with soap and plenty of water while removing contaminated clothing and shoes. Continue rinsing for at least 15 minutes. See a physician if irritation persists.

### Following eye contact:

Immediately flush eyes, under eyelids with water for 15 minutes. Remove contact lenses, if present to do

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so. Protect unexposed eye. Continue rinsing on the way to hospital.

### Following ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by physician or poison control center. Rinse mouth with water. Never give anything to drink to an unconscious person. Seek medical advice.

### Self-Protection of the first aider:

Not determined or not available.

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

### Acute symptoms and effects:

Symptoms may include blistering, irritation, burns and pain. Effects are dependent on exposure (dose, concentration, contact time).

### Delayed symptoms and effects:

Symptoms of poisoning may appear several hours later.

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

### Specific treatment:

None known.

### Notes for the doctor:

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media:

Alcohol- resistant foam, Dry chemical or Carbon dioxide

#### Unsuitable extinguishing media:

None known

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

Evacuate all personnel to a predetermined safe location, no less than 2,500 feet in all directions. Can explode or detonate under fire conditions. Burning material may produce toxic vapors.

### 5.3 Advice for firefighters

#### Personal protection equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA)

#### Special precautions:

Avoid inhaling gases, fumes, mist, dust, vapor or aerosols. Avoid contact with eyes, skin, hair or clothing.

## SECTION 6: Accidental release measures

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

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

### 6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

### 6.4 Reference to other sections:

For disposal see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

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

Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use

#### 7.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### SECTION 8: Exposure controls/personal protection



#### 8.1 Control parameters

Only those substances with limit values have been included below.

##### Occupational Exposure limit values:

| Country (Legal Basis) | Substance                   | Identifier | Permissible concentration        |
|-----------------------|-----------------------------|------------|----------------------------------|
| Lithuania             | 2-hydroxyethyl methacrylate | 868-77-9   | 8-Hour TWA: 20 mg/m <sup>3</sup> |

##### Biological limit values:

No biological exposure limits noted for the ingredient(s).

##### Derived No Effect Level (DNEL):

Ingredient Name: 2-hydroxyethyl methacrylate

CAS #: 868-77-9

|                            |                      |                                   |
|----------------------------|----------------------|-----------------------------------|
| Workers - Systemic Effects | Acute - Oral         | Not determined or not applicable. |
|                            | Acute - Inhalation   | No hazard identified              |
|                            | Acute - Dermal       | No hazard identified              |
|                            | Chronic - Oral       | Not determined or not applicable. |
|                            | Chronic - Inhalation | 4.9 mg/m <sup>3</sup>             |
|                            | Chronic - Dermal     | 1.3 mg/kg bw/day                  |
| Workers - Local Effects    | Acute - Oral         | Not determined or not applicable. |
|                            | Acute - Inhalation   | No hazard identified              |
|                            | Acute - Dermal       | No hazard identified              |
|                            | Chronic - Oral       | Not determined or not applicable. |
|                            | Chronic - Inhalation | No hazard identified              |
|                            | Chronic - Dermal     | No hazard identified              |

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|                                       |                      |                                   |
|---------------------------------------|----------------------|-----------------------------------|
| General Population - Systemic Effects | Acute - Oral         | No hazard identified              |
|                                       | Acute - Inhalation   | No hazard identified              |
|                                       | Acute - Dermal       | No hazard identified              |
|                                       | Chronic - Oral       | 0.83 mg/kg bw/day                 |
|                                       | Chronic - Inhalation | 2.9 mg/m <sup>3</sup>             |
|                                       | Chronic - Dermal     | 0.83 mg/kg bw/day                 |
| General Population - Local Effect     | Acute - Oral         | Not determined or not applicable. |
|                                       | Acute - Inhalation   | No hazard identified              |
|                                       | Acute - Dermal       | No hazard identified              |
|                                       | Chronic - Oral       | Not determined or not applicable. |
|                                       | Chronic - Inhalation | No hazard identified              |
|                                       | Chronic - Dermal     | No hazard identified              |

**Ingredient Name:** Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

**CAS #:** 162881-26-7

|                                       |                      |  |
|---------------------------------------|----------------------|--|
| Workers - Systemic Effects            | Acute - Oral         | Not determined or not applicable.  |
|                                       | Acute - Inhalation   | No hazard identified; 7.84 mg/m <sup>3</sup> ; 16.46 mg/m <sup>3</sup>   |
|                                       | Acute - Dermal       | No hazard identified; 3.33 mg/kg bw/day; 4.67 mg/kg bw/day   |
|                                       | Chronic - Oral       | Not determined or not applicable.  |
|                                       | Chronic - Inhalation | 7.84 mg/m <sup>3</sup> ; 11.75 mg/m <sup>3</sup> ; 16.46 mg/m <sup>3</sup> ; 21 mg/m <sup>3</sup>  |
|                                       | Chronic - Dermal     | 3 mg/kg bw/day; 3.33 mg/kg bw/day; 4.67 mg/kg bw/day   |
| Workers - Local Effects               | Acute - Oral         | Not determined or not applicable.  |
|                                       | Acute - Inhalation   | No hazard identified; Hazard identified but no DNEL available  |
|                                       | Acute - Dermal       | Hazard identified but no DNEL available; No hazard identified  |
|                                       | Chronic - Oral       | Not determined or not applicable.  |
|                                       | Chronic - Inhalation | No hazard identified; Hazard identified but no DNEL available  |
|                                       | Chronic - Dermal     | Hazard identified but no DNEL available; No hazard identified  |
| General Population - Systemic Effects | Acute - Oral         | No hazard identified; 1.67 mg/kg bw/day; Hazard identified but no DNEL available   |
|                                       | Acute - Inhalation   | 3.92 mg/m <sup>3</sup> ; Hazard identified but no DNEL available; 1.93 mg/m <sup>3</sup> ; 2.92 mg/m <sup>3</sup> ; 3.92 mg/m <sup>3</sup>   |
|                                       | Acute - Dermal       | No hazard identified; 1.67 mg/kg bw/day  |
|                                       | Chronic - Oral       | No hazard identified; 1.5 mg/kg bw/day; 1.67 mg/kg bw/day  |
|                                       | Chronic - Inhalation | 1.93 mg/m <sup>3</sup> ; 2.9 mg/m <sup>3</sup> ; 2.92 mg/m <sup>3</sup> ; 3.92 mg/m <sup>3</sup> ; 5.2 mg/m <sup>3</sup> ; 1.67 mg/kg bw/day |
|                                       | Chronic - Dermal     | 1.5 mg/kg bw/day   |
| General Population - Local Effect     | Acute - Oral         | Not determined or not applicable.  |
|                                       | Acute - Inhalation   | Hazard identified but no DNEL available; No hazard identified  |
|                                       | Acute - Dermal       | Hazard identified but no DNEL available; No hazard identified  |
|                                       | Chronic - Oral       | Not determined or not applicable.  |
|                                       | Chronic - Inhalation | No hazard identified; Hazard identified but no DNEL available  |
|                                       | Chronic - Dermal     | Hazard identified but no DNEL available; No hazard identified  |

**Predicted No Effect Concentration (PNEC):**

**Ingredient Name:** 2-hydroxyethyl methacrylate

**CAS #:** 868-77-9

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| Environmental Protection Target    | PNEC                             |
|------------------------------------|----------------------------------|
| Fresh water                        | 0.482 mg/L                       |
| Freshwater sediments               | 3.79 mg/kg                       |
| Marine water                       | 0.482 mg/L                       |
| Marine sediments                   | 3.79 mg/kg                       |
| Food chain                         | Not determined or not available. |
| Microorganisms in sewage treatment | 10 mg/L                          |
| Soil (agricultural)                | 0.476 mg/kg                      |
| Air                                | No hazard identified             |

**Ingredient Name:** Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

**CAS #:** 162881-26-7

| Environmental Protection Target    | PNEC                             |
|------------------------------------|----------------------------------|
| Fresh water                        | 0.8 µg/L                         |
| Freshwater sediments               | 0.712 mg/kg                      |
| Marine water                       | 0.8 µg/L; 1 µg/L; 1 µg/L         |
| Marine sediments                   | 0.712 mg/kg                      |
| Food chain                         | Not determined or not available. |
| Microorganisms in sewage treatment | 1 mg/L                           |
| Soil (agricultural)                | Not determined or not available. |
| Air                                | No hazard identified             |

### Information on monitoring procedures:

Not determined or not applicable.

## 8.2 Exposure controls

### Appropriate engineering controls:

Effective ventilation in all processing areas.

### Personal protection equipment

#### Eye and face protection:

Safety goggles

#### Skin and body protection:

Impervious clothing and chemical resistant gloves

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory protection

### General hygienic measures:

Handle in accordance with good industrial hygiene and safety measures. Wash hands and face after handling chemical products. Wash hands before eating, drinking and smoking. Wash hands at the end of the workday.

### Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

|   |                                   |
|---|-----------------------------------|
| Product (substance / mixture) related measures to prevent exposure: | Not determined or not applicable. |
| Instruction measures to prevent exposure:                           | Not determined or not applicable. |
| Organisational measures to prevent exposure:                        | Not determined or not applicable. |
| Technical measures to prevent exposure:                             | Not determined or not applicable. |

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### Risk management measures to control exposure:

Not determined or not applicable.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |                           |
|---|---------------------------|
| Appearance                              | Transparent Yellow Liquid |
| Odor                                    | Characteristic acrylate   |
| Odor threshold                          | No data available         |
| pH                                      | No data available         |
| Melting point/freezing point            | No data available         |
| Initial boiling point/range             | >100°C (>212°F)           |
| Flash point (closed cup)                | >93.5°C (>199.4°F)        |
| Evaporation rate                        | No data available         |
| Flammability (solid, gas)               | Not Flammable             |
| Upper flammability/explosive limit      | No data available         |
| Lower flammability/explosive limit      | No data available         |
| Vapor pressure                          | No data available         |
| Vapor density                           | No data available         |
| Density                                 | 1.09 g/cm <sup>3</sup>    |
| Relative density                        | No data available         |
| Solubilities                            | No data available         |
| Partition coefficient (n-octanol/water) | No data available         |
| Auto/Self-ignition temperature          | No data available         |
| Decomposition temperature               | No data available         |
| Dynamic viscosity                       | ~ 620 cps @ 25°C (77°F)   |
| Kinematic viscosity                     | No data available         |
| Explosive properties                    | No data available         |
| Oxidizing properties                    | No data available         |

### 9.2 Other information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity:

Does not react under normal conditions of use and storage.

### 10.2 Chemical stability:

Stable under normal storage and handling conditions.

### 10.3 Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### 10.4 Conditions to avoid:

Incompatible materials.

Avoid storage >38°C (100°F) and exposure to light/direct sunlight and heat.

### 10.5 Incompatible materials:

Strong oxidizing agents.

Polymerization initiators, including peroxides, strong oxidizing agents, alcohols, copper, copper alloys, carbon steel, iron, rust, and strong bases.

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### 10.6 Hazardous decomposition products:

Hazardous decomposition products formed during fire conditions may include oxides of carbon, nitrogen and various hydrocarbon fragments.

Hazardous polymerization may occur. Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

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

**Product data:** No data available.

#### Substance data:

| Name                        | Route | Result                |
|-----------------------------|-------|-----------------------|
| 2-hydroxyethyl methacrylate | oral  | LD50 Rat : 5564 mg/kg |

#### Skin corrosion/irritation

#### Assessment:

Causes skin irritation.

#### Product data:

No data available.

#### Substance data:

| Name                        | Result                  |
|-----------------------------|-------------------------|
| 2-hydroxyethyl methacrylate | Causes skin irritation. |

#### Serious eye damage/irritation

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

#### Product data:

No data available.

#### Substance data:

| Name                        | Result                         |
|-----------------------------|--------------------------------|
| 2-hydroxyethyl methacrylate | Causes serious eye irritation. |

#### Respiratory or skin sensitization

#### Assessment:

May cause an allergic skin reaction.

#### Product data:

No data available.

#### Substance data:

| Name   | Result                               |
|--|--------------------------------------|
| 2-hydroxyethyl methacrylate                        | May cause an allergic skin reaction. |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | May cause an allergic skin reaction. |
| Urethane Dimethacrylate                            | May cause an allergic skin reaction. |

#### Carcinogenicity

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

**Product data:** No data available.

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**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):** None of the ingredients are listed.

#### Germ cell mutagenicity

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

**Product data:** No data available.

**Substance data:** No data available.

#### Reproductive Toxicity

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

**Product data:**

No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (single exposure)

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

**Product data:**

No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (repeated exposure)

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

**Product data:**

No data available.

**Substance data:** No data available.

#### Aspiration toxicity

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

**Product data:**

No data available.

**Substance data:** No data available.

#### Information on likely routes of exposure:

No data available.

#### Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

#### Other information:

No data available.

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Acute (short-term) toxicity

**Assessment:**

Toxic to aquatic life with long lasting effects.

**Product data:** No data available.

**Substance data:** No data available.

##### Chronic (long-term) toxicity

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

**Product data:** No data available.

**Substance data:**

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| Name   | Result                           |
|--|----------------------------------|
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | EC50 Activated sludge : 100 mg/L |

### 12.2 Persistence and degradability

**Product data:** No data available.

**Substance data:**

| Name   | Result  |
|--|---|
| 2-hydroxyethyl methacrylate                        | This substance is considered readily biodegradable. |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | This substance is not readily biodegradable.        |
| Urethane Dimethacrylate                            | This substance is not readily biodegradable.        |

### 12.3 Bioaccumulative potential

**Product data:** No data available.

**Substance data:**

| Name   | Result  |
|--|---|
| 2-hydroxyethyl methacrylate                        | This substance has low potential to bioaccumulate.  |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Bioaccumulation in organisms is not to be expected. |

### 12.4 Mobility in soil

**Product data:** No data available.

**Substance data:**

| Name   | Result  |
|--|---|
| 2-hydroxyethyl methacrylate                        | This substance has low potential to be adsorbed by the soil.  |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Based upon the log K <sub>oc</sub> of 3.85 an adsorption to the soil is expected.                       |
| Urethane Dimethacrylate                            | This substance is expected to disturb between the water column and organic soil and sediment particles. |

### 12.5 Results of PBT and vPvB assessment

**PBT assessment:**

|  |                            |
|--|----------------------------|
| 2-hydroxyethyl methacrylate                        | This substance is not PBT. |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | This substance is not PBT. |
| Urethane Dimethacrylate                            | This substance is not PBT. |

**vPvB assessment:**

|  |                             |
|--|-----------------------------|
| 2-hydroxyethyl methacrylate                        | This substance is not vPvB. |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | This substance is not vPvB. |
| Urethane Dimethacrylate                            | This substance is not vPvB. |

**12.6 Other adverse effects:** No data available.

**12.7 Hazard to the ozone layer**

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

**Product data:** No data available.

**Substance data:** No data available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

13.1.1 **Product / Packaging disposal:** Not determined or not available.

**Waste codes / waste designations according to LoW:** Not determined or not available.

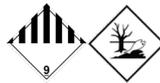
13.1.2 **Waste treatment-relevant information:** Not determined or not available.

13.1.3 **Sewage disposal-relevant information:** Not determined or not available.

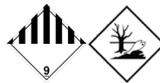
13.1.4 **Other disposal recommendations:** It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

### SECTION 14: Transport information

#### International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

|                               |   |
|-------------------------------|---|
| UN number                     | UN 3082   |
| UN proper shipping name       | Environmentally hazardous substance, liquid, n.o.s. methacrylate polymer  |
| UN transport hazard class(es) | 9   |
| Packing group                 | III   |
| Environmental hazards         | Marine Pollutant  |
| Special precautions for user  | None  |
| Additional Information        | This product is not regulated as a dangerous good when a single unit is transported in container sizes of ≤5 L or ≤5 kg, provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |

#### International Carriage of Dangerous Goods by Inland Waterways (ADN)

|                               |  |
|-------------------------------|--|
| UN number                     | UN 3082  |
| UN proper shipping name       | Environmentally hazardous substance, liquid, n.o.s. Methacrylate Polymer   |
| UN transport hazard class(es) | 9   |
| Packing group                 | III  |
| Environmental hazards         | Marine Pollutant   |
| Special precautions for user  | None   |
| Additional Information        | This product is not regulated as a dangerous good when a single unit is transported in container sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |

#### International Maritime Dangerous Goods (IMDG)

|           |         |
|-----------|---------|
| UN number | UN 3082 |
|-----------|---------|

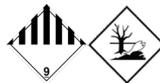
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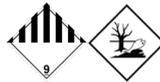
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|                               |   |
|-------------------------------|---|
| UN proper shipping name       | Environmentally hazardous substance, liquid, n.o.s. Methacrylate Polymer  |
| UN transport hazard class(es) | 9    |
| Packing group                 | III   |
| Environmental hazards         | Marine Pollutant  |
| Special precautions for user  | None  |
| Additional Information        | This product is not regulated as a dangerous good when a single unit is transported in container sizes of ≤5 L or ≤5 kg, provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

|                               |   |
|-------------------------------|---|
| UN number                     | UN 3082   |
| UN proper shipping name       | Environmentally hazardous substance, liquid, n.o.s. Methacrylate Polymer  |
| UN transport hazard class(es) | 9    |
| Packing group                 | III   |
| Environmental hazards         | Marine Pollutant  |
| Special precautions for user  | None  |
| Additional Information        | This product is not regulated as a dangerous good when a single unit is transported in container sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. |

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

|                    |      |
|--------------------|------|
| Bulk Name          | None |
| Ship type          | None |
| Pollution category | None |

## SECTION 15: Regulatory information

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

#### European regulations

##### Inventory listing (EINECS):

|             |  |            |
|-------------|--|------------|
| 868-77-9    | 2-hydroxyethyl methacrylate                        | Listed     |
| 162881-26-7 | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Not Listed |
| 72869-86-4  | Urethane Dimethacrylate                            | Listed     |

##### REACH SVHC candidate list:

|             |  |            |
|-------------|--|------------|
| 868-77-9    | 2-hydroxyethyl methacrylate                        | Not Listed |
| 162881-26-7 | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Not Listed |

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|            |                         |            |
|------------|-------------------------|------------|
| 72869-86-4 | Urethane Dimethacrylate | Not Listed |
|------------|-------------------------|------------|

### REACH SVHC Authorizations:

|             |  |            |
|-------------|--|------------|
| 868-77-9    | 2-hydroxyethyl methacrylate                        | Not Listed |
| 162881-26-7 | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Not Listed |
| 72869-86-4  | Urethane Dimethacrylate                            | Not Listed |

### REACH Restriction:

|             |  |            |
|-------------|--|------------|
| 868-77-9    | 2-hydroxyethyl methacrylate                        | Not Listed |
| 162881-26-7 | Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | Not Listed |
| 72869-86-4  | Urethane Dimethacrylate                            | Not Listed |

Water hazard class (WGK) (Product): Not determined.

### Water hazard class (WGK) (Substance):

| Ingredient Name                                    | CAS         | Class   |
|--|-------------|---|
| 2-hydroxyethyl methacrylate                        | 868-77-9    | Water hazard class 1: slightly hazardous to water |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | 162881-26-7 | Water hazard class 1: slightly hazardous to water |
| Urethane Dimethacrylate                            | 72869-86-4  | Water hazard class 1: slightly hazardous to water |

### Other regulations

#### Germany TA Luft:

| Ingredient Name  | CAS         | Class          | Base Emission Rate | Max Concentration |
|--|-------------|----------------|--------------------|-------------------|
| 2-hydroxyethyl methacrylate  | 868-77-9    | Not Applicable |                    |                   |
| Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide   | 162881-26-7 | Not Applicable |                    |                   |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate | 72869-86-4  | Not Applicable |                    |                   |

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: Other information

Abbreviations and Acronyms: None

### Classification procedure:

| Classification according to Regulation (EC) No. 1272/2008 (CLP) | Method Used        |
|---|--------------------|
| Skin irritation, category 2                                     | Calculation method |
| Skin sensitization, category 1                                  | Calculation method |
| Chronic aquatic hazard, category 2                              | Calculation method |

### Summary of classification(s) in section 3:

|               |                             |
|---------------|-----------------------------|
| Skin Irrit. 2 | Skin irritation, category 2 |
|---------------|-----------------------------|

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|                   |                                    |
|-------------------|------------------------------------|
| Skin Sens. 1      | Skin sensitization, category 1     |
| Eye Irrit. 2      | Eye Irritation, category 2         |
| Aquatic Chronic 4 | Chronic aquatic hazard, category 4 |

#### Summary of hazard statements in section 3:

|      |  |
|------|--|
| H315 | Causes skin irritation                                 |
| H317 | May cause an allergic skin reaction                    |
| H319 | Causes serious eye irritation                          |
| H413 | May cause long lasting harmful effects to aquatic life |

#### Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP) and EC No. 1907/2006 (REACH). The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet