

# Sicherheitsdatenblatt



Produkt: 3843

Hersteller: HENKEL KGAA

Warengruppe: 3DP

Artikelgruppe: 3DP RESINS

Download: 20.04.2024

**LOCTITE 3D 3843 HDT60 GREY**

Dieses Datenblatt wurde Ihnen von der Firma tewipack Uhl GmbH zur Verfügung gestellt. Die Firma tewipack Uhl GmbH übernimmt keinerlei Verantwortung für die Aktualität und die Richtigkeit der enthaltenen Informationen. Die Eigenschaften der Produkte können sich aufgrund verschiedener Einflüsse wie beispielsweise Zusammensetzung und Zustand des Substrats, Unreinheiten in oder auf dem Substrat, Temperatur und Luftfeuchtigkeit bei der Lagerung und Umgebungsbedingungen während der Anwendung ändern. Bei Verwendung dieses Produkts in Kombination mit anderem Material ist der Kunde dafür verantwortlich, durch eigene Tests zu prüfen, ob das Produkt für die geplante Kombination geeignet ist und ob diese Kombination die erwarteten Ergebnisse liefert



## Safety Data Sheet according to (EC) No 1907/2006 as amended

Page 1 of 26

LOCTITE 3D 3843 HDT 60 HIGH TOUGHNESS GREY

SDS No. : 682289

V003.0

Revision: 24.09.2021

printing date: 22.11.2021

Replaces version from: 16.09.2020

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

#### 1.1. Product identifier

LOCTITE 3D 3843 HDT 60 HIGH TOUGHNESS GREY

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

Intended use:

Acrylate adhesive

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

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

Fax-no.: +49 211 798 2009

ua-productsafety.de@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/app/Selection> or [www.henkel-adhesives.com](http://www.henkel-adhesives.com).

#### 1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no. +49-(0)211-797-3350 for exceptional cases.

### SECTION 2: Hazards identification

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

##### Classification (CLP):

Skin irritation

Category 2

H315 Causes skin irritation.

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Skin sensitizer

Category 1

H317 May cause an allergic skin reaction.

Chronic hazards to the aquatic environment

Category 2

H411 Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Label elements (CLP):

**Hazard pictogram:****Contains**

2-Hydroxyethyl methacrylate

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

2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester

Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide  
 Reaction mass of pentamethyl-4-piperidylsebacates  
 Triacrylate ester  
 Ethylene dimethacrylate

**Signal word:**

Warning

**Hazard statement:**

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

**Precautionary statement:  
Prevention**

P273 Avoid release to the environment.  
 P280 Wear protective gloves.

**Precautionary statement:  
Response**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice/attention.

**2.3. Other hazards**

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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

**Declaration of the ingredients according to CLP (EC) No 1272/2008:**

| <b>Hazardous components<br/>CAS-No.</b>                                                                      | <b>EC Number<br/>REACH-Reg No.</b>                                    | <b>content</b> | <b>Classification</b>                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | 212-782-2<br>01-2119490169-29                                         | 25- 50 %       | Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Eye Irrit. 2<br>H319                                                                                              |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | 276-957-5<br>01-2120751202-68                                         | 10- 20 %       | Skin Sens. 1B<br>H317<br>Aquatic Chronic 2<br>H411                                                                                                                 |
| Isobornyl methacrylate<br>7534-94-3                                                                          | 231-403-1<br>01-2119886505-27                                         | 5- < 10 %      | Aquatic Chronic 3<br>H412                                                                                                                                          |
| 2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester<br>2351-43-1                                     |                                                                       | 1- < 5 %       | Eye Irrit. 2<br>H319<br>Skin Sens. 1<br>H317                                                                                                                       |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            | 915-687-0<br>01-2119491304-40                                         | 0,25- < 2,5 %  | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410<br>Skin Sens. 1A<br>H317                                                                                      |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                | 278-355-8<br>01-2119972295-29                                         | 0,1- < 1 %     | Repr. 2<br>H361f<br>Aquatic Chronic 2<br>H411<br>Skin Sens. 1B<br>H317                                                                                             |
| Triacrylate ester<br>52408-84-1                                                                              | 500-114-5<br>500-114-5<br>01-2119487948-12                            | 0,1- < 1 %     | Eye Irrit. 2<br>H319<br>Skin Sens. 1B<br>H317                                                                                                                      |
| methacrylic acid<br>79-41-4                                                                                  | 201-204-4<br>01-2119463884-26                                         | 0,1- < 1 %     | Acute Tox. 4; Oral<br>H302<br>Acute Tox. 3; Dermal<br>H311<br>Acute Tox. 4; Inhalation<br>H332<br>Skin Corr. 1A<br>H314<br>Eye Dam. 1<br>H318<br>STOT SE 3<br>H335 |
| Ethylene dimethacrylate<br>97-90-5                                                                           | 202-617-2<br>01-2119965172-38                                         | 0,1- < 1 %     | STOT SE 3<br>H335<br>Skin Sens. 1<br>H317                                                                                                                          |
| Butyl hydroxytoluene<br>128-37-0                                                                             | 204-881-4<br>01-2119480433-40<br>01-2119555270-46<br>01-2119565113-46 | 0,1- < 0,25 %  | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410                                                                                                               |

For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:  
Rinse with running water and soap.  
Obtain medical attention if irritation persists.

Eye contact:  
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:  
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

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

See section: Description of first aid measures

### **SECTION 5: Fire fighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media:**

water, carbon dioxide, foam, powder

##### **Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) can be released.

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

##### **Additional information:**

In case of fire, keep containers cool with water spray.

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

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

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Keep away from sources of ignition.

#### **6.2. Environmental precautions**

Do not empty into drains / surface water / ground water.

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

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Dispose of contaminated material as waste according to Section 13.

#### **6.4. Reference to other sections**

See advice in section 8

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

#### **7.1. Precautions for safe handling**

Avoid skin and eye contact.

See advice in section 8

## Hygiene measures:

Good industrial hygiene practices should be observed.  
Wash hands before work breaks and after finishing work.  
Do not eat, drink or smoke while working.

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

Storage at 8 to 28°C is recommended.

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

Acrylate adhesive

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**

Valid for  
Germany

| <b>Ingredient [Regulated substance]</b> | <b>ppm</b> | <b>mg/m<sup>3</sup></b> | <b>Value type</b>                   | <b>Short term exposure limit category/ Remarks</b>                                                                                             | <b>Regulatory list</b> |
|-----------------------------------------|------------|-------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Methacrylic acid<br>79-41-4             | 50         | 180                     | Exposure limit(s):                  | 2<br>If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).                             | TRGS 900               |
| Methacrylic acid<br>79-41-4             |            |                         | Short Term Exposure Classification: | Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages. | TRGS 900               |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0  |            |                         | Short Term Exposure Classification: | Category II: substances with a resorptive effect.                                                                                              | TRGS 900               |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0  |            | 10                      | Exposure limit(s):                  | 4<br>If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).                             | TRGS 900               |

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

| Name on list                                                            | Environmental<br>Compartment       | Exposure<br>period | Value            |     |                |        | Remarks                             |
|-------------------------------------------------------------------------|------------------------------------|--------------------|------------------|-----|----------------|--------|-------------------------------------|
|                                                                         |                                    |                    | mg/l             | ppm | mg/kg          | others |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | aqua<br>(freshwater)               |                    | 0,482 mg/l       |     |                |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | aqua (marine<br>water)             |                    | 0,482 mg/l       |     |                |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | sewage<br>treatment plant<br>(STP) |                    | 10 mg/l          |     |                |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | aqua<br>(intermittent<br>releases) |                    | 1 mg/l           |     |                |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | sediment<br>(freshwater)           |                    |                  |     | 3,79 mg/kg     |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | sediment<br>(marine water)         |                    |                  |     | 3,79 mg/kg     |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | Soil                               |                    |                  |     | 0,476<br>mg/kg |        |                                     |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                 | Predator                           |                    |                  |     |                |        | no potential for<br>bioaccumulation |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | aqua<br>(freshwater)               |                    | 4,66 µg/l        |     |                |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | Soil                               |                    |                  |     | 0,118<br>mg/kg |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | sewage<br>treatment plant<br>(STP) |                    | 2,45 mg/l        |     |                |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | sediment<br>(freshwater)           |                    |                  |     | 0,604<br>mg/kg |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | aqua<br>(intermittent<br>releases) |                    | 0,0179<br>mg/l   |     |                |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | aqua (marine<br>water)             |                    | 0,000466<br>mg/l |     |                |        |                                     |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl<br>methacrylate<br>7534-94-3 | sediment<br>(marine water)         |                    |                  |     | 0,06 mg/kg     |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | aqua<br>(freshwater)               |                    | 0,002200<br>mg/l |     |                |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | aqua (marine<br>water)             |                    | 0,00022<br>mg/l  |     |                |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | aqua<br>(intermittent<br>releases) |                    | 0,009 mg/l       |     |                |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | sewage<br>treatment plant<br>(STP) |                    | 1 mg/l           |     |                |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | sediment<br>(freshwater)           |                    |                  |     | 1,05 mg/kg     |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | sediment<br>(marine water)         |                    |                  |     | 0,11 mg/kg     |        |                                     |
| Reaction mass of pentamethyl-4-<br>piperidylsebacates<br>1065336-91-5   | Soil                               |                    |                  |     | 0,21 mg/kg     |        |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8        | aqua<br>(freshwater)               |                    | 0,0014<br>mg/l   |     |                |        |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8        | aqua (marine<br>water)             |                    | 0,00014<br>mg/l  |     |                |        |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8        | freshwater -<br>intermittent       |                    | 0,014 mg/l       |     |                |        |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine                               | marine water -                     |                    | 0,0014           |     |                |        |                                     |

|                                                                           |                                    |  |                  |  |                 |  |                                     |
|---------------------------------------------------------------------------|------------------------------------|--|------------------|--|-----------------|--|-------------------------------------|
| oxide<br>75980-60-8                                                       | intermittent                       |  | mg/l             |  |                 |  |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8          | sediment<br>(freshwater)           |  |                  |  | 0,115<br>mg/kg  |  |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8          | sediment<br>(marine water)         |  |                  |  | 0,0115<br>mg/kg |  |                                     |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine<br>oxide<br>75980-60-8          | Soil                               |  |                  |  | 0,0222<br>mg/kg |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | aqua<br>(freshwater)               |  | 0,006 mg/l       |  |                 |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | aqua<br>(intermittent<br>releases) |  | 0,057 mg/l       |  |                 |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | Sewage<br>treatment plant          |  | 10 mg/l          |  |                 |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | sediment<br>(freshwater)           |  |                  |  | 0,017<br>mg/kg  |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | sediment<br>(marine water)         |  |                  |  | 0,002<br>mg/kg  |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | aqua (marine<br>water)             |  | 0,001 mg/l       |  |                 |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | oral                               |  |                  |  | 5,6 mg/kg       |  |                                     |
| Glycerol, propoxylated, esters with acrylic<br>acid 1-6.5PO<br>52408-84-1 | Soil                               |  |                  |  | 0,012<br>mg/kg  |  |                                     |
| methacrylic acid<br>79-41-4                                               | aqua<br>(freshwater)               |  | 0,82 mg/l        |  |                 |  |                                     |
| methacrylic acid<br>79-41-4                                               | aqua (marine<br>water)             |  | 0,82 mg/l        |  |                 |  |                                     |
| methacrylic acid<br>79-41-4                                               | sewage<br>treatment plant<br>(STP) |  | 10 mg/l          |  |                 |  |                                     |
| methacrylic acid<br>79-41-4                                               | aqua<br>(intermittent<br>releases) |  | 0,82 mg/l        |  |                 |  |                                     |
| methacrylic acid<br>79-41-4                                               | Soil                               |  |                  |  | 1,2 mg/kg       |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | aqua<br>(freshwater)               |  | 0,139 mg/l       |  |                 |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | aqua (marine<br>water)             |  | 0,0139<br>mg/l   |  |                 |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | aqua<br>(intermittent<br>releases) |  | 0,15 mg/l        |  |                 |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | sewage<br>treatment plant<br>(STP) |  | 57 mg/l          |  |                 |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | sediment<br>(freshwater)           |  |                  |  | 1,6 mg/kg       |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | sediment<br>(marine water)         |  |                  |  | 0,16 mg/kg      |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | Air                                |  |                  |  |                 |  | no hazard identified                |
| Ethylene dimethacrylate<br>97-90-5                                        | Soil                               |  |                  |  | 0,239<br>mg/kg  |  |                                     |
| Ethylene dimethacrylate<br>97-90-5                                        | Predator                           |  |                  |  |                 |  | no potential for<br>bioaccumulation |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                    | aqua<br>(freshwater)               |  | 0,000199<br>mg/l |  |                 |  |                                     |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                    | aqua (marine<br>water)             |  | 0,00002<br>mg/l  |  |                 |  |                                     |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                    | sewage<br>treatment plant<br>(STP) |  | 0,17 mg/l        |  |                 |  |                                     |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                    | sediment<br>(freshwater)           |  |                  |  | 0,0996<br>mg/kg |  |                                     |

|                                        |                                    |  |                 |  |                  |  |                      |
|----------------------------------------|------------------------------------|--|-----------------|--|------------------|--|----------------------|
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | sediment<br>(marine water)         |  |                 |  | 0,00996<br>mg/kg |  |                      |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Soil                               |  |                 |  | 0,04769<br>mg/kg |  |                      |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | oral                               |  |                 |  | 8,33 mg/kg       |  |                      |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | aqua<br>(intermittent<br>releases) |  | 0,00199<br>mg/l |  |                  |  |                      |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Air                                |  |                 |  |                  |  | no hazard identified |

**Derived No-Effect Level (DNEL):**

| Name on list                                                           | Application Area   | Route of Exposure | Health Effect                         | Exposure Time | Value        | Remarks                          |
|------------------------------------------------------------------------|--------------------|-------------------|---------------------------------------|---------------|--------------|----------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                | Workers            | dermal            | Long term exposure - systemic effects |               | 1,3 mg/kg    | no potential for bioaccumulation |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                | Workers            | Inhalation        | Long term exposure - systemic effects |               | 4,9 mg/m3    | no potential for bioaccumulation |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                | General population | dermal            | Long term exposure - systemic effects |               | 0,83 mg/kg   | no potential for bioaccumulation |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                | General population | Inhalation        | Long term exposure - systemic effects |               | 2,9 mg/m3    | no potential for bioaccumulation |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                | General population | oral              | Long term exposure - systemic effects |               | 0,83 mg/kg   | no potential for bioaccumulation |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate<br>7534-94-3   | Workers            | dermal            | Long term exposure - systemic effects |               | 1,04 mg/kg   |                                  |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate<br>7534-94-3   | General population | dermal            | Long term exposure - systemic effects |               | 0,625 mg/kg  |                                  |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5      | Workers            | inhalation        | Long term exposure - systemic effects |               | 1,27 mg/m3   |                                  |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5      | Workers            | dermal            | Long term exposure - systemic effects |               | 1,8 mg/kg    |                                  |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5      | General population | dermal            | Long term exposure - systemic effects |               | 0,9 mg/kg    |                                  |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5      | General population | inhalation        | Long term exposure - systemic effects |               | 0,31 mg/m3   |                                  |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5      | General population | oral              | Long term exposure - systemic effects |               | 0,18 mg/kg   |                                  |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>75980-60-8          | Workers            | inhalation        | Long term exposure - systemic effects |               | 0,822 mg/m3  |                                  |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>75980-60-8          | Workers            | dermal            | Long term exposure - systemic effects |               | 0,233 mg/kg  |                                  |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>75980-60-8          | General population | inhalation        | Long term exposure - systemic effects |               | 0,145 mg/m3  |                                  |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>75980-60-8          | General population | dermal            | Long term exposure - systemic effects |               | 0,0833 mg/kg |                                  |
| Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>75980-60-8          | General population | oral              | Long term exposure - systemic effects |               | 0,0833 mg/kg |                                  |
| Glycerol, propoxylated, esters with acrylic acid 1-6.5PO<br>52408-84-1 | Workers            | inhalation        | Long term exposure - systemic effects |               | 16,22 mg/m3  |                                  |
| Glycerol, propoxylated, esters with acrylic acid 1-6.5PO<br>52408-84-1 | Workers            | dermal            | Long term exposure - systemic effects |               | 1,92 mg/kg   |                                  |
| Glycerol, propoxylated, esters with acrylic acid 1-6.5PO<br>52408-84-1 | General population | oral              | Long term exposure - systemic effects |               | 1,39 mg/kg   |                                  |
| Glycerol, propoxylated, esters with acrylic acid 1-6.5PO<br>52408-84-1 | General population | inhalation        | Long term exposure - systemic effects |               | 4,87 mg/m3   |                                  |
| Glycerol, propoxylated, esters with acrylic acid 1-6.5PO<br>52408-84-1 | General population | dermal            | Long term exposure - systemic effects |               | 1,15 mg/kg   |                                  |
| methacrylic acid<br>79-41-4                                            | Workers            | Inhalation        | Long term exposure - local effects    |               | 88 mg/m3     |                                  |
| methacrylic acid<br>79-41-4                                            | Workers            | Inhalation        | Long term exposure -                  |               | 29,6 mg/m3   |                                  |

|                                        |                    |            |                                       |  |            |                      |
|----------------------------------------|--------------------|------------|---------------------------------------|--|------------|----------------------|
|                                        |                    |            | systemic effects                      |  |            |                      |
| methacrylic acid<br>79-41-4            | Workers            | dermal     | Long term exposure - systemic effects |  | 4,25 mg/kg |                      |
| methacrylic acid<br>79-41-4            | General population | Inhalation | Long term exposure - local effects    |  | 6,55 mg/m3 |                      |
| methacrylic acid<br>79-41-4            | General population | Inhalation | Long term exposure - systemic effects |  | 6,3 mg/m3  |                      |
| methacrylic acid<br>79-41-4            | General population | dermal     | Long term exposure - systemic effects |  | 2,55 mg/kg |                      |
| Ethylene dimethacrylate<br>97-90-5     | Workers            | inhalation | Long term exposure - systemic effects |  | 2,45 mg/m3 | no hazard identified |
| Ethylene dimethacrylate<br>97-90-5     | Workers            | dermal     | Long term exposure - systemic effects |  | 1,3 mg/kg  | no hazard identified |
| Ethylene dimethacrylate<br>97-90-5     | General population | inhalation | Long term exposure - systemic effects |  | 1,45 mg/m3 | no hazard identified |
| Ethylene dimethacrylate<br>97-90-5     | General population | dermal     | Long term exposure - systemic effects |  | 0,83 mg/kg | no hazard identified |
| Ethylene dimethacrylate<br>97-90-5     | General population | oral       | Long term exposure - systemic effects |  | 0,83 mg/kg | no hazard identified |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Workers            | inhalation | Long term exposure - systemic effects |  | 3,5 mg/m3  | no hazard identified |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Workers            | dermal     | Long term exposure - systemic effects |  | 0,5 mg/kg  | no hazard identified |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | inhalation | Long term exposure - systemic effects |  | 0,86 mg/m3 | no hazard identified |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | dermal     | Long term exposure - systemic effects |  | 0,25 mg/kg | no hazard identified |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | oral       | Long term exposure - systemic effects |  | 0,25 mg/kg | no hazard identified |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

**Hand protection:**

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Eye protection:**

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

**Skin protection:**

Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

**Advices to personal protection equipment:**

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

## SECTION 9: Physical and chemical properties

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

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Appearance                             | liquid<br>liquid<br>grey           |
| Odor                                   | Acrylate                           |
| Odour threshold                        | No data available / Not applicable |
| pH                                     | Not applicable                     |
| Melting point                          | No data available / Not applicable |
| Solidification temperature             | No data available / Not applicable |
| Initial boiling point                  | No data available / Not applicable |
| Flash point                            | > 93,3 °C (> 199.94 °F)            |
| Evaporation rate                       | No data available / Not applicable |
| Flammability                           | No data available / Not applicable |
| Explosive limits                       | No data available / Not applicable |
| Vapour pressure                        | No data available / Not applicable |
| Relative vapour density:               | No data available / Not applicable |
| Density                                | 1,0 - 1,2 g/cm <sup>3</sup>        |
| ( )                                    |                                    |
| Bulk density                           | No data available / Not applicable |
| Solubility                             | No data available / Not applicable |
| Solubility (qualitative)               | No data available / Not applicable |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Auto-ignition temperature              | No data available / Not applicable |
| Decomposition temperature              | No data available / Not applicable |
| Viscosity                              | 600 mPa.s                          |
| ( )                                    |                                    |
| Viscosity (kinematic)                  | No data available / Not applicable |
| Explosive properties                   | No data available / Not applicable |
| Oxidising properties                   | No data available / Not applicable |

**9.2. Other information**

No data available / Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with strong oxidants.

Acids.

Reducing agents.

Strong bases.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

Stable under normal conditions of storage and use.

### 10.5. Incompatible materials

See section reactivity.

### 10.6. Hazardous decomposition products

carbon oxides.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                               | Value<br>type | Value         | Species | Method                                                            |
|---------------------------------------------------------------------------------------------------------------|---------------|---------------|---------|-------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                       | LD50          | > 5.000 mg/kg | rat     | not specified                                                     |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazaheptadecane-1,16-diyl bismethacrylate<br>72869-86-4 | LD50          | > 5.000 mg/kg | rat     | OECD Guideline 401 (Acute Oral Toxicity)                          |
| Isobornyl methacrylate<br>7534-94-3                                                                           | LD50          | 3.160 mg/kg   | rat     | not specified                                                     |
| 2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester<br>2351-43-1                                      | LD50          | 5.564 mg/kg   | rat     | FDA Guideline                                                     |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                             | LD50          | 3.230 mg/kg   | rat     | OECD Guideline 423 (Acute Oral toxicity)                          |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                 | LD50          | > 5.000 mg/kg | rat     | OECD Guideline 401 (Acute Oral Toxicity)                          |
| Triacrylate ester<br>52408-84-1                                                                               | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 401 (Acute Oral Toxicity)                          |
| methacrylic acid<br>79-41-4                                                                                   | LD50          | 1.320 mg/kg   | rat     | equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) |
| Ethylene dimethacrylate<br>97-90-5                                                                            | LD50          | 8.700 mg/kg   | rat     | FDA Guideline                                                     |
| Butyl hydroxytoluene<br>128-37-0                                                                              | LD50          | > 6.000 mg/kg | rat     | OECD Guideline 401 (Acute Oral Toxicity)                          |

**Acute dermal toxicity:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.                                                                                  | Value type                    | Value             | Species | Method                                     |
|---------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------|---------|--------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                       | LD50                          | > 5.000 mg/kg     | rabbit  | not specified                              |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazaheptadecane-1,16-diyl bismethacrylate<br>72869-86-4 | LD50                          | > 2.000 mg/kg     | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Isobornyl methacrylate<br>7534-94-3                                                                           | LD50                          | > 3.000 mg/kg     | rabbit  | not specified                              |
| 2-Propenoic acid, 2-methyl-, 2-(2-hydroxyethoxy)ethyl ester<br>2351-43-1                                      | LD50                          | > 5.000 mg/kg     | rabbit  | not specified                              |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                             | LD50                          | > 3.170 mg/kg     | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                             | Acute toxicity estimate (ATE) | 3.171 mg/kg       |         | Expert judgement                           |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                 | LD50                          | > 2.000 mg/kg     | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Triacrylate ester<br>52408-84-1                                                                               | LD50                          | > 2.000 mg/kg     | rabbit  | OECD Guideline 402 (Acute Dermal Toxicity) |
| methacrylic acid<br>79-41-4                                                                                   | LD50                          | 500 - 1.000 mg/kg | rabbit  | Dermal Toxicity Screening                  |
| methacrylic acid<br>79-41-4                                                                                   | Acute toxicity estimate (ATE) | 500 mg/kg         |         | Expert judgement                           |
| Ethylene dimethacrylate<br>97-90-5                                                                            | LD50                          | > 2.000 mg/kg     | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Butyl hydroxytoluene<br>128-37-0                                                                              | LD50                          | > 2.000 mg/kg     | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |

**Acute inhalative toxicity:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No. | Value<br>type                          | Value      | Test atmosphere | Exposure<br>time | Species | Method                                         |
|---------------------------------|----------------------------------------|------------|-----------------|------------------|---------|------------------------------------------------|
| methacrylic acid<br>79-41-4     | LC50                                   | > 3,6 mg/l | dust/mist       | 4 h              | rat     | OECD Guideline 403 (Acute Inhalation Toxicity) |
| methacrylic acid<br>79-41-4     | Acute<br>toxicity<br>estimate<br>(ATE) | 3,61 mg/l  |                 |                  |         | Expert judgement                               |

**Skin corrosion/irritation:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                                          | Result               | Exposure<br>time | Species | Method                                                   |
|--------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|---------|----------------------------------------------------------|
| 7,7,9(or 7,9,9)-trimethyl-<br>4,13-dioxo-3,14-dioxo-<br>5,12-diazahexadecane-<br>1,16-diyl bismethacrylate<br>72869-86-4 | not irritating       | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Isobornyl methacrylate<br>7534-94-3                                                                                      | mildly<br>irritating |                  | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| 2-Propenoic acid, 2-<br>methyl-, 2-(2-<br>hydroxyethoxy)ethyl ester<br>2351-43-1                                         | not irritating       | 24 h             | rabbit  | Draize Test                                              |
| Diphenyl-2,4,6-<br>trimethylbenzoyl<br>phosphine oxide<br>75980-60-8                                                     | not irritating       | 24 h             | rabbit  | not specified                                            |
| Triacrylate ester<br>52408-84-1                                                                                          | not irritating       | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| methacrylic acid<br>79-41-4                                                                                              | corrosive            | 3 min            | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Ethylene dimethacrylate<br>97-90-5                                                                                       | not irritating       | 24 h             | rabbit  | FDA Guideline                                            |
| Butyl hydroxytoluene<br>128-37-0                                                                                         | not irritating       | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                                          | Result                 | Exposure<br>time | Species | Method                                                |
|--------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|---------|-------------------------------------------------------|
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9                                                                               | irritating             |                  | rabbit  | Draize Test                                           |
| 7,7,9(or 7,9,9)-trimethyl-<br>4,13-dioxo-3,14-dioxo-<br>5,12-diazahexadecane-<br>1,16-diyl bismethacrylate<br>72869-86-4 | not irritating         | 24 h             | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| 2-Propenoic acid, 2-<br>methyl-, 2-(2-<br>hydroxyethoxy)ethyl ester<br>2351-43-1                                         | irritating             |                  | rabbit  | Draize Test                                           |
| Diphenyl-2,4,6-<br>trimethylbenzoyl<br>phosphine oxide<br>75980-60-8                                                     | not irritating         |                  | rabbit  | not specified                                         |
| Triacrylate ester<br>52408-84-1                                                                                          | irritating             |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| methacrylic acid<br>79-41-4                                                                                              | corrosive              |                  | rabbit  | Draize Test                                           |
| Ethylene dimethacrylate<br>97-90-5                                                                                       | not irritating         |                  | rabbit  | Draize Test                                           |
| Butyl hydroxytoluene<br>128-37-0                                                                                         | slightly<br>irritating |                  | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| <b>Hazardous substances<br/>CAS-No.</b>                                                                      | <b>Result</b>   | <b>Test type</b>                   | <b>Species</b> | <b>Method</b>                                                    |
|--------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------|----------------|------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | sensitising     | Guinea pig maximisation test       | guinea pig     | not specified                                                    |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | sensitising     | Mouse local lymphnode assay (LLNA) | mouse          | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)  |
| Isobornyl methacrylate<br>7534-94-3                                                                          | not sensitising | Guinea pig maximisation test       | guinea pig     | OECD Guideline 406 (Skin Sensitisation)                          |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            | sensitising     | Guinea pig maximisation test       | guinea pig     | OECD Guideline 406 (Skin Sensitisation)                          |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                | sensitising     | Mouse local lymphnode assay (LLNA) | mouse          | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)  |
| Triacrylate ester<br>52408-84-1                                                                              | sensitising     | Mouse local lymphnode assay (LLNA) | mouse          | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)  |
| methacrylic acid<br>79-41-4                                                                                  | not sensitising | Buehler test                       | guinea pig     | equivalent or similar to OECD Guideline 406 (Skin Sensitisation) |
| Ethylene dimethacrylate<br>97-90-5                                                                           | sensitising     | Mouse local lymphnode assay (LLNA) | mouse          | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)  |
| Butyl hydroxytoluene<br>128-37-0                                                                             | not sensitising | Draize Test                        | guinea pig     | Draize Test                                                      |

**Germ cell mutagenicity:**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| <b>Hazardous substances<br/>CAS-No.</b>                       | <b>Result</b> | <b>Type of study/<br/>Route of<br/>administration</b> | <b>Metabolic<br/>activation/<br/>Exposure time</b> | <b>Species</b> | <b>Method</b>                                                                                 |
|---------------------------------------------------------------|---------------|-------------------------------------------------------|----------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                       | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                         |
| 2-Hydroxyethyl methacrylate<br>868-77-9                       | positive      | in vitro mammalian chromosome aberration test         | with and without                                   |                | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                            |
| 2-Hydroxyethyl methacrylate<br>868-77-9                       | negative      | mammalian cell gene mutation assay                    | with and without                                   |                | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                               |
| 2-Hydroxyethyl methacrylate<br>868-77-9                       | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)             |
| Isobornyl methacrylate<br>7534-94-3                           | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                         |
| Isobornyl methacrylate<br>7534-94-3                           | negative      |                                                       | with and without                                   |                | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                               |
| Isobornyl methacrylate<br>7534-94-3                           | negative      | in vitro mammalian chromosome aberration test         | with and without                                   |                | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                            |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8 | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                         |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8 | negative      | in vitro mammalian chromosome aberration test         | with and without                                   |                | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                            |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8 | negative      | mammalian cell gene mutation assay                    | with and without                                   |                | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                               |
| Triacrylate ester<br>52408-84-1                               | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                                         |
| Triacrylate ester<br>52408-84-1                               | negative      | in vitro mammalian chromosome aberration test         | with and without                                   |                | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                            |
| Triacrylate ester<br>52408-84-1                               | positive      | mammalian cell gene mutation assay                    | with and without                                   |                | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                               |
| methacrylic acid<br>79-41-4                                   | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)                |
| Ethylene dimethacrylate<br>97-90-5                            | positive      |                                                       | without                                            |                | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                            |
| Butyl hydroxytoluene<br>128-37-0                              | negative      | bacterial reverse mutation assay (e.g Ames test)      | with and without                                   |                | not specified                                                                                 |
| Butyl hydroxytoluene<br>128-37-0                              | negative      | in vitro mammalian chromosome aberration test         | with and without                                   |                | not specified                                                                                 |
| Butyl hydroxytoluene<br>128-37-0                              | negative      | mammalian cell gene mutation assay                    | with                                               |                | not specified                                                                                 |
| 2-Hydroxyethyl methacrylate<br>868-77-9                       | negative      | oral: gavage                                          |                                                    | rat            | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)                                  |
| Triacrylate ester<br>52408-84-1                               | negative      | oral: gavage                                          |                                                    | mouse          | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)                                  |
| methacrylic acid<br>79-41-4                                   | negative      | inhalation                                            |                                                    | mouse          | equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test) |
| methacrylic acid<br>79-41-4                                   | negative      | oral: gavage                                          |                                                    | mouse          | equivalent or similar to OECD Guideline 474 (Mammalian                                        |

|                                 |          |                   |  |       |                                                              |
|---------------------------------|----------|-------------------|--|-------|--------------------------------------------------------------|
|                                 |          |                   |  |       | Erythrocyte Micronucleus Test)                               |
| Ethylene dimethacrylate 97-90-5 | negative | oral: unspecified |  | mouse | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) |
| Butyl hydroxytoluene 128-37-0   | negative | oral: feed        |  | rat   | not specified                                                |

### Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous components CAS-No.         | Result           | Route of application | Exposure time / Frequency of treatment   | Species | Sex         | Method                                       |
|--------------------------------------|------------------|----------------------|------------------------------------------|---------|-------------|----------------------------------------------|
| 2-Hydroxyethyl methacrylate 868-77-9 |                  | inhalation           | 102 weeks<br>6 hours/day,<br>5 days/week | rat     | female      | OECD Guideline 451 (Carcinogenicity Studies) |
| methacrylic acid 79-41-4             | not carcinogenic | inhalation           | 2 y                                      | mouse   | male/female | OECD Guideline 451 (Carcinogenicity Studies) |
| Ethylene dimethacrylate 97-90-5      |                  | inhalation           | 2 years<br>6 hours/day,<br>5 days/week   | rat     | male/female | OECD Guideline 451 (Carcinogenicity Studies) |
| Butyl hydroxytoluene 128-37-0        |                  | oral: feed           | 2 y<br>daily                             | rat     | male        |                                              |

### Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances CAS-No.         | Result / Value                                               | Test type            | Route of application | Species | Method                                                                                                                   |
|--------------------------------------|--------------------------------------------------------------|----------------------|----------------------|---------|--------------------------------------------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate 868-77-9 | NOAEL P $\geq$ 1.000 mg/kg<br>NOAEL F1 $\geq$ 1.000 mg/kg    | screening            | oral: gavage         | rat     | OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)      |
| Isobornyl methacrylate 7534-94-3     | NOAEL P 25 mg/kg<br>NOAEL F1 500 mg/kg                       |                      | oral: gavage         | rat     | OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)                                                |
| Triacrylate ester 52408-84-1         | NOAEL P 750 mg/kg<br>NOAEL F1 $\geq$ 750 mg/kg               | screening            | oral: gavage         | rat     | OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| methacrylic acid 79-41-4             | NOAEL P 50 mg/kg<br>NOAEL F1 400 mg/kg<br>NOAEL F2 400 mg/kg | Two generation study | oral: gavage         | rat     | OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)                                                          |
| Ethylene dimethacrylate 97-90-5      | NOAEL P $\geq$ 1.000 mg/kg<br>NOAEL F1 $\geq$ 1.000 mg/kg    |                      | oral: gavage         | rat     | OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| Butyl hydroxytoluene 128-37-0        | NOAEL P 500 mg/kg                                            | Two generation study | oral: feed           | rat     | not specified                                                                                                            |

### STOT-single exposure:

No data available.

**STOT-repeated exposure::**

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                      | Result / Value  | Route of<br>application | Exposure time /<br>Frequency of<br>treatment | Species | Method                                                                                                                                  |
|----------------------------------------------------------------------|-----------------|-------------------------|----------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9                           | NOAEL 100 mg/kg | oral: gavage            | once daily                                   | rat     | OECD Guideline 422<br>(Combined Repeated<br>Dose Toxicity Study with<br>the Reproduction /<br>Developmental Toxicity<br>Screening Test) |
| Diphenyl-2,4,6-<br>trimethylbenzoyl<br>phosphine oxide<br>75980-60-8 | NOAEL 100 mg/kg | oral: gavage            | 3 m<br>5 d/w                                 | rat     | OECD Guideline 408<br>(Repeated Dose 90-Day<br>Oral Toxicity in Rodents)                                                                |
| Triacrylate ester<br>52408-84-1                                      | NOAEL 250 mg/kg | oral: gavage            | 28-52 d<br>daily                             | rat     | OECD Guideline 422<br>(Combined Repeated<br>Dose Toxicity Study with<br>the Reproduction /<br>Developmental Toxicity<br>Screening Test) |
| methacrylic acid<br>79-41-4                                          |                 | inhalation              | 90 d<br>6 h/d, 5 d/w                         | rat     | OECD Guideline 413<br>(Subchronic Inhalation<br>Toxicity: 90-Day)                                                                       |
| Ethylene dimethacrylate<br>97-90-5                                   | NOAEL 100 mg/kg | oral: gavage            | once daily                                   | rat     | OECD Guideline 422<br>(Combined Repeated<br>Dose Toxicity Study with<br>the Reproduction /<br>Developmental Toxicity<br>Screening Test) |
| Butyl hydroxytoluene<br>128-37-0                                     | NOAEL 25 mg/kg  | oral: feed              | daily                                        | rat     | not specified                                                                                                                           |

**Aspiration hazard:**

No data available.

## SECTION 12: Ecological information

### General ecological information:

Do not empty into drains / surface water / ground water.

### 12.1. Toxicity

#### Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                              | Value<br>type | Value                       | Exposure time | Species                                         | Method                                                   |
|--------------------------------------------------------------------------------------------------------------|---------------|-----------------------------|---------------|-------------------------------------------------|----------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | LC50          | > 100 mg/l                  | 96 h          | Oryzias latipes                                 | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | LC50          | 10,1 mg/l                   | 96 h          | Danio rerio                                     | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| Isobornyl methacrylate<br>7534-94-3                                                                          | LC50          | 1,79 mg/l                   | 96 h          | Danio rerio                                     | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            | LC50          | 0,9 mg/l                    | 96 h          | Danio rerio                                     | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                | LC50          | > 1 - 10 mg/l               | 48 h          | Oryzias latipes                                 | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| Triacrylate ester<br>52408-84-1                                                                              | LC50          | 5,74 mg/l                   | 96 h          | Danio rerio (reported as Brachydanio rerio)     | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| methacrylic acid<br>79-41-4                                                                                  | LC50          | 85 mg/l                     | 96 h          | Salmo gairdneri (new name: Oncorhynchus mykiss) | EPA OTS 797.1400 (Fish Acute Toxicity Test)              |
| Ethylene dimethacrylate<br>97-90-5                                                                           | LC50          | 15,95 mg/l                  | 96 h          | Danio rerio                                     | OECD Guideline 203 (Fish, Acute Toxicity Test)           |
| Butyl hydroxytoluene<br>128-37-0                                                                             | LC50          | Toxicity > Water solubility | 96 h          | Brachydanio rerio (new name: Danio rerio)       | EU Method C.1 (Acute Toxicity for Fish)                  |
| Butyl hydroxytoluene<br>128-37-0                                                                             | NOEC          | 0,053 mg/l                  | 30 d          | Oryzias latipes                                 | OECD Guideline 210 (fish early life stage toxicity test) |

#### Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                              | Value<br>type | Value           | Exposure time | Species       | Method                                                                           |
|--------------------------------------------------------------------------------------------------------------|---------------|-----------------|---------------|---------------|----------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | EC50          | 380 mg/l        | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | EC50          | > 1,2 mg/l      | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| Isobornyl methacrylate<br>7534-94-3                                                                          | EC50          | > 2,57 mg/l     | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                | EC50          | > 10 - 100 mg/l | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| Triacrylate ester<br>52408-84-1                                                                              | EC50          | 91,4 mg/l       | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| methacrylic acid<br>79-41-4                                                                                  | EC50          | > 130 mg/l      | 48 h          | Daphnia magna | EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids) |
| Ethylene dimethacrylate<br>97-90-5                                                                           | EC50          | 44,9 mg/l       | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |
| Butyl hydroxytoluene<br>128-37-0                                                                             | EC50          | 0,48 mg/l       | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)                       |

|  |  |  |  |  |                      |
|--|--|--|--|--|----------------------|
|  |  |  |  |  | Immobilisation Test) |
|--|--|--|--|--|----------------------|

**Chronic toxicity to aquatic invertebrates**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                       | Value<br>type | Value      | Exposure time | Species       | Method                                      |
|-----------------------------------------------------------------------|---------------|------------|---------------|---------------|---------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                               | NOEC          | 24,1 mg/l  | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Isobornyl methacrylate<br>7534-94-3                                   | NOEC          | 0,233 mg/l | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Reaction mass of pentamethyl-<br>4-piperidylsebacates<br>1065336-91-5 | NOEC          | 1 mg/l     | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Ethylene dimethacrylate<br>97-90-5                                    | NOEC          | 5,05 mg/l  | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Butyl hydroxytoluene<br>128-37-0                                      | NOEC          | 0,069 mg/l | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |

**Toxicity (Algae):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                                                                         | Value<br>type | Value                          | Exposure time | Species                                                                     | Method                                               |
|-------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------|---------------|-----------------------------------------------------------------------------|------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                                 | EC50          | 836 mg/l                       | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                                 | NOEC          | 400 mg/l                       | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| 7,7,9(or 7,9,9)-trimethyl-4,13-<br>dioxo-3,14-dioxo-5,12-<br>diazahexadecane-1,16-diyl<br>bismethacrylate<br>72869-86-4 | NOEC          | 0,21 mg/l                      | 72 h          | Desmodesmus subspicatus                                                     | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Isobornyl methacrylate<br>7534-94-3                                                                                     | EC50          | 2,66 mg/l                      | 96 h          | Pseudokirchneriella subcapitata                                             | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Isobornyl methacrylate<br>7534-94-3                                                                                     | NOEC          | 0,254 mg/l                     | 96 h          | Pseudokirchneriella subcapitata                                             | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Reaction mass of pentamethyl-<br>4-piperidylsebacates<br>1065336-91-5                                                   | NOEC          | 0,22 mg/l                      | 72 h          | Desmodesmus subspicatus                                                     | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Reaction mass of pentamethyl-<br>4-piperidylsebacates<br>1065336-91-5                                                   | EC50          | 1,68 mg/l                      | 72 h          | Desmodesmus subspicatus                                                     | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Diphenyl-2,4,6-<br>trimethylbenzoyl phosphine<br>oxide<br>75980-60-8                                                    | EC50          | > 10 - 100 mg/l                | 72 h          |                                                                             | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Triacrylate ester<br>52408-84-1                                                                                         | EC50          | 12,2 mg/l                      | 72 h          | Desmodesmus subspicatus<br>(reported as Scenedesmus<br>subspicatus)         | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Triacrylate ester<br>52408-84-1                                                                                         | EC10          | 2,06 mg/l                      | 72 h          | Desmodesmus subspicatus                                                     | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| methacrylic acid<br>79-41-4                                                                                             | NOEC          | 8,2 mg/l                       | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| methacrylic acid<br>79-41-4                                                                                             | EC50          | 45 mg/l                        | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Ethylene dimethacrylate<br>97-90-5                                                                                      | EC50          | 17,3 mg/l                      | 72 h          | Pseudokirchneriella subcapitata                                             | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Ethylene dimethacrylate<br>97-90-5                                                                                      | EC10          | 6,93 mg/l                      | 72 h          | Pseudokirchneriella subcapitata                                             | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Butyl hydroxytoluene<br>128-37-0                                                                                        | EC50          | Toxicity > Water<br>solubility | 72 h          | Desmodesmus subspicatus<br>(reported as Scenedesmus<br>subspicatus)         | EU Method C.3 (Algal<br>Inhibition test)             |
| Butyl hydroxytoluene<br>128-37-0                                                                                        | EC10          | 0,4 mg/l                       | 72 h          | Desmodesmus subspicatus<br>(reported as Scenedesmus<br>subspicatus)         | EU Method C.3 (Algal<br>Inhibition test)             |

### Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous substances<br>CAS-No.                                      | Value<br>type | Value                          | Exposure time | Species                                                | Method                                                                            |
|----------------------------------------------------------------------|---------------|--------------------------------|---------------|--------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                              | EC0           | > 3.000 mg/l                   | 16 h          | Pseudomonas fluorescens                                | other guideline:                                                                  |
| Diphenyl-2,4,6-<br>trimethylbenzoyl phosphine<br>oxide<br>75980-60-8 | EC 50         | > 1.000 mg/l                   | 30 min        |                                                        | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test)          |
| Triacrylate ester<br>52408-84-1                                      | EC20          | 507 mg/l                       | 3 h           | activated sludge                                       | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test)          |
| methacrylic acid<br>79-41-4                                          | EC10          | 100 mg/l                       | 17 h          |                                                        | not specified                                                                     |
| Ethylene dimethacrylate<br>97-90-5                                   | EC50          | 570 mg/l                       | 3 h           | activated sludge of a<br>predominantly domestic sewage | ISO 8192 (Test for<br>Inhibition of Oxygen<br>Consumption by Activated<br>Sludge) |
| Butyl hydroxytoluene<br>128-37-0                                     | EC50          | Toxicity > Water<br>solubility | 3 h           | activated sludge                                       | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test)          |

**12.2. Persistence and degradability**

| Hazardous substances<br>CAS-No.                                                                              | Result                                           | Test type | Degradability | Exposure<br>time | Method                                                                             |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------|---------------|------------------|------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | readily biodegradable                            | aerobic   | 92 - 100 %    | 14 d             | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))              |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | not readily biodegradable.                       | aerobic   | 22 %          | 28 d             | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)                  |
| Isobornyl methacrylate<br>7534-94-3                                                                          | readily biodegradable                            | aerobic   | 70 %          | 28 d             | OECD Guideline 310 (Ready Biodegradability CO2 in Sealed Vessels (Headspace Test)) |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            |                                                  | aerobic   | 38 %          | 28 d             | OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)        |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                |                                                  |           | < 20 %        | 28 d             | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)        |
| Triacrylate ester<br>52408-84-1                                                                              | readily biodegradable                            | aerobic   | 72 - 85 %     | 28 d             | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)                  |
| methacrylic acid<br>79-41-4                                                                                  | inherently biodegradable                         | aerobic   | 100 %         | 14 d             | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)           |
| methacrylic acid<br>79-41-4                                                                                  | readily biodegradable                            | aerobic   | 86 %          | 28 d             | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)                  |
| Ethylene dimethacrylate<br>97-90-5                                                                           | readily biodegradable, but failing 10-day window | aerobic   | 69 %          | 28 d             | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)        |
| Butyl hydroxytoluene<br>128-37-0                                                                             | not readily biodegradable.                       | aerobic   | 4,5 %         | 28 d             | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))              |
| Butyl hydroxytoluene<br>128-37-0                                                                             | not inherently biodegradable                     | aerobic   | 5,2 - 5,6 %   | 35 d             | OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))          |

**12.3. Bioaccumulative potential**

| Hazardous substances<br>CAS-No.     | Bioconcentration factor (BCF) | Exposure time | Temperature | Species         | Method                                                                                  |
|-------------------------------------|-------------------------------|---------------|-------------|-----------------|-----------------------------------------------------------------------------------------|
| Isobornyl methacrylate<br>7534-94-3 | 37                            | 56 day        | 24 °C       | Danio rerio     | OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)                          |
| Butyl hydroxytoluene<br>128-37-0    | 330 - 1.800                   | 56 d          |             | Cyprinus carpio | OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish) |

**12.4. Mobility in soil**

| Hazardous substances<br>CAS-No.                                                                              | LogPow      | Temperature | Method                                                                             |
|--------------------------------------------------------------------------------------------------------------|-------------|-------------|------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | 0,42        | 25 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | 3,39        | 20 °C       | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)        |
| Isobornyl methacrylate<br>7534-94-3                                                                          | 5,09        |             | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)        |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            | 2,37 - 2,77 | 25 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| methacrylic acid<br>79-41-4                                                                                  | 0,93        | 22 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Ethylene dimethacrylate<br>97-90-5                                                                           | 2,4         |             | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)        |
| Butyl hydroxytoluene<br>128-37-0                                                                             | 5,1         |             | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |

## 12.5. Results of PBT and vPvB assessment

| Hazardous substances<br>CAS-No.                                                                              | PBT/ vPvB                                                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9                                                                      | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate<br>72869-86-4 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Isobornyl methacrylate<br>7534-94-3                                                                          | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5                                            | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide<br>75980-60-8                                                | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Triacrylate ester<br>52408-84-1                                                                              | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| methacrylic acid<br>79-41-4                                                                                  | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Ethylene dimethacrylate<br>97-90-5                                                                           | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Butyl hydroxytoluene<br>128-37-0                                                                             | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

## 12.6. Other adverse effects

No data available.

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Product disposal:

Do not empty into drains / surface water / ground water.

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09\* waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

## SECTION 14: Transport information

### 14.1. UN number

|      |      |
|------|------|
| ADR  | 3082 |
| RID  | 3082 |
| ADN  | 3082 |
| IMDG | 3082 |
| IATA | 3082 |

### 14.2. UN proper shipping name

|      |                                                                                                                                  |
|------|----------------------------------------------------------------------------------------------------------------------------------|
| ADR  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction mass of pentamethyl-4-piperidylsebacates, Urethane dimethacrylate) |
| RID  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction mass of pentamethyl-4-piperidylsebacates, Urethane dimethacrylate) |
| ADN  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction mass of pentamethyl-4-piperidylsebacates, Urethane dimethacrylate) |
| IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction mass of pentamethyl-4-piperidylsebacates, Urethane dimethacrylate) |
| IATA | Environmentally hazardous substance, liquid, n.o.s. (Reaction mass of pentamethyl-4-piperidylsebacates, Urethane dimethacrylate) |

### 14.3. Transport hazard class(es)

|      |   |
|------|---|
| ADR  | 9 |
| RID  | 9 |
| ADN  | 9 |
| IMDG | 9 |
| IATA | 9 |

### 14.4. Packing group

|      |     |
|------|-----|
| ADR  | III |
| RID  | III |
| ADN  | III |
| IMDG | III |
| IATA | III |

### 14.5. Environmental hazards

|      |                  |
|------|------------------|
| ADR  | not applicable   |
| RID  | not applicable   |
| ADN  | not applicable   |
| IMDG | Marine pollutant |
| IATA | not applicable   |

### 14.6. Special precautions for user

|      |                               |
|------|-------------------------------|
| ADR  | not applicable<br>Tunnelcode: |
| RID  | not applicable                |
| ADN  | not applicable                |
| IMDG | not applicable                |
| IATA | not applicable                |

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), A197 (IATA), 2.10.2.7 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

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

not applicable

## SECTION 15: Regulatory information

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

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): | Not applicable |
| Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):     | Not applicable |
| Persistent organic pollutants (Regulation (EU) 2019/1021):      | Not applicable |
| VOC content<br>(2010/75/EC)                                     | < 3 %          |

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### National regulations/information (Germany):

WGK: WGK 2: significantly water endangering (Ordinance on facilities for handling substances that are hazardous to water (AwSV) )  
Classification according to AwSV, Annex 1 (5.2)

Storage class according to TRGS 510: 10

## SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H361f Suspected of damaging fertility.  
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.

### Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

**Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.**

---

**Annex - Exposure Scenarios:**

---

Exposure Scenarios for 2-Hydroxyethyl methacrylate can be downloaded under the following link:  
<https://mysds.henkel.com/index.html#/appSelection>