



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

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LOCTITE ABLESTIK 2035SC known as Ablebond 2035SC (7g)  
DE

SDS No. : 448306  
V002.0  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

LOCTITE ABLESTIK 2035SC known as Ablebond 2035SC (7g) DE

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

Intended use:  
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

#### 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

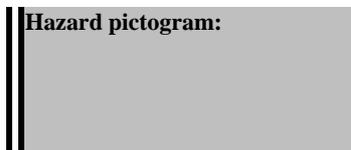
##### Classification (CLP):

|   |            |
|---|------------|
| 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

Isobornyl acrylate

Tris(2-acryloxyethyl) isocyanurate  
t-Butylcyclohexylpercarbonate  
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700)  
Dibenzoyl peroxide  
  
Dicyclohexyl phthalate

|  |  |
|--|--|
| <b>Signal word:</b>                                  | <b>Warning</b>   |
| <b>Hazard statement:</b>                             | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H411 Toxic to aquatic life with long lasting effects.                                      |
| <b>Precautionary statement:</b><br><b>Prevention</b> | P273 Avoid release to the environment.<br>P280 Wear protective gloves.   |
| <b>Precautionary statement:</b><br><b>Response</b>   | P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P302+P352 IF ON SKIN: Wash with plenty of soap and water. |

### 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:**

| Hazardous components<br>CAS-No.  | EC Number<br>REACH-Reg No.    | content       | Classification  |
|--|-------------------------------|---------------|---|
| Isobornyl acrylate<br>5888-33-5  | 227-561-6<br>01-2119957862-25 | 10- 20 %      | Skin Irrit. 2<br>H315<br>Eye Irrit. 2<br>H319<br>STOT SE 3<br>H335<br>Skin Sens. 1B<br>H317<br>Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410   |
| Tris(2-acryloxyethyl) isocyanurate<br>40220-08-4   | 254-843-6                     | 1- < 3 %      | Eye Dam. 1<br>H318<br>Skin Sens. 1<br>H317  |
| t-Butylcyclohexylpercarbonate<br>15520-11-3  | 239-557-1<br>01-2119966122-42 | 1- < 5 %      | Org. Perox. C<br>H242<br>Skin Sens. 1<br>H317<br>Aquatic Chronic 4<br>H413  |
| reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight≤700)<br>25068-38-6 | 01-2119456619-26              | 0,1- < 1 %    | Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Eye Irrit. 2<br>H319<br>Aquatic Chronic 2<br>H411  |
| Diphenylether<br>101-84-8  | 202-981-2                     | 0,1- < 1 %    | Aquatic Chronic 3<br>H412<br>Eye Irrit. 2<br>H319<br>Aquatic Acute 1<br>H400  |
| Dicyclohexyl phthalate<br>84-61-7  | 201-545-9<br>01-2119978223-34 | 0,1- < 0,3 %  | Repr. 1B<br>H360D<br>Skin Sens. 1<br>H317<br>Aquatic Chronic 3<br>H412<br>=====<br>EU. REACH Candidate List of Substances of<br>Very High Concern for Authorization<br>(SVHC)                     |
| Dibenzoyl peroxide<br>94-36-0  | 202-327-6<br>01-2119511472-50 | 0,1- < 1 %    | Org. Perox. B<br>H241<br>Eye Irrit. 2<br>H319<br>Skin Sens. 1<br>H317<br>Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410<br>M factor (Acute Aquat Tox): 10 M factor<br>(Chron Aquat Tox): 10 |
| Hydroquinone<br>123-31-9   | 204-617-8<br>01-2119524016-51 | 0,01- < 0,1 % | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410<br>Carc. 2<br>H351<br>Muta. 2<br>H341<br>Acute Tox. 4; Oral<br>H302<br>Eye Dam. 1<br>H318<br>Skin Sens. 1                                    |

|  |  |  |  |
|--|--|--|--|
|  |  |  | H317<br>M factor (Acute Aquat Tox): 10 |
|--|--|--|--|

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:

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

#### 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: Firefighting 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.

### 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**

Ensure good ventilation/extraction.

Keep container tightly sealed.

Refer to Technical Data Sheet

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

Adhesive

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

Valid for  
Germany

| Ingredient [Regulated substance]               | ppm | mg/m <sup>3</sup> | Value type                          | Short term exposure limit category / Remarks   | Regulatory list |
|--|-----|-------------------|-------------------------------------|--|-----------------|
| Silicon dioxide<br>7631-86-9                   |     | 4                 | Exposure limit(s):                  | If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).                                  | TRGS 900        |
| Diphenyl ether<br>101-84-8                     | 1   | 7,1               | Exposure limit(s):                  | 1<br>If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).                             | TRGS 900        |
| Diphenyl ether<br>101-84-8                     |     |                   | 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        |
| Diphenyl ether<br>101-84-8<br>[DIPHENYL ETHER] | 1   | 7                 | Time Weighted Average (TWA):        | Indicative   | ECLTV           |
| Diphenyl ether<br>101-84-8<br>[DIPHENYL ETHER] | 2   | 14                | Short Term Exposure Limit (STEL):   | Indicative   | ECLTV           |
| Dibenzoyl peroxide<br>94-36-0                  |     |                   | 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        |
| Dibenzoyl peroxide<br>94-36-0                  |     | 5                 | Exposure limit(s):                  | 1  | TRGS 900        |

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

| Name on list  | Environmental Compartment          | Exposure period | Value            |     |                 |        | Remarks |
|---|------------------------------------|-----------------|------------------|-----|-----------------|--------|---------|
|   |                                    |                 | mg/l             | ppm | mg/kg           | others |         |
| Isobornyl acrylate<br>5888-33-5   | aqua<br>(freshwater)               |                 | 0,00092<br>mg/l  |     |                 |        |         |
| Isobornyl acrylate<br>5888-33-5   | aqua (marine<br>water)             |                 | 0,000092<br>mg/l |     |                 |        |         |
| Isobornyl acrylate<br>5888-33-5   | sewage<br>treatment plant<br>(STP) |                 | 2 mg/l           |     |                 |        |         |
| Isobornyl acrylate<br>5888-33-5   | aqua<br>(intermittent<br>releases) |                 | 0,00704<br>mg/l  |     |                 |        |         |
| Isobornyl acrylate<br>5888-33-5   | sediment<br>(freshwater)           |                 |                  |     | 0,145<br>mg/kg  |        |         |
| Isobornyl acrylate<br>5888-33-5   | sediment<br>(marine water)         |                 |                  |     | 0,0145<br>mg/kg |        |         |
| Isobornyl acrylate<br>5888-33-5   | Soil                               |                 |                  |     | 0,0285<br>mg/kg |        |         |
| Isobornyl acrylate<br>5888-33-5   | Air                                |                 |                  |     |                 |        |         |
| Isobornyl acrylate<br>5888-33-5   | Predator                           |                 |                  |     |                 |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | aqua<br>(freshwater)               |                 | 0,39 mg/l        |     |                 |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | aqua (marine<br>water)             |                 | 0,039 mg/l       |     |                 |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | aqua<br>(intermittent<br>releases) |                 | 0,39 mg/l        |     |                 |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | aqua<br>(freshwater)               |                 |                  |     | 4685<br>mg/kg   |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | sediment<br>(marine water)         |                 |                  |     | 468,5<br>mg/kg  |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | Soil                               |                 |                  |     | 936,8<br>mg/kg  |        |         |
| Bis(4-tert-butylcyclohexyl)<br>peroxydicarbonate<br>15520-11-3  | sewage<br>treatment plant<br>(STP) |                 | 2 mg/l           |     |                 |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | aqua<br>(freshwater)               |                 | 0,006 mg/l       |     |                 |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | aqua (marine<br>water)             |                 | 0,001 mg/l       |     |                 |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | sewage<br>treatment plant<br>(STP) |                 | 10 mg/l          |     |                 |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | sediment<br>(freshwater)           |                 |                  |     | 0,996<br>mg/kg  |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | sediment<br>(marine water)         |                 |                  |     | 0,1 mg/kg       |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | Soil                               |                 |                  |     | 0,196<br>mg/kg  |        |         |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | oral                               |                 |                  |     | 11 mg/kg        |        |         |
| Reaction product: bisphenol-A-  | aqua                               |                 | 0,018 mg/l       |     |                 |        |         |

|  |                              |  |               |  |               |  |
|--|------------------------------|--|---------------|--|---------------|--|
| (epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | (intermittent releases)      |  |               |  |               |  |
| Dicyclohexyl phthalate<br>84-61-7  | aqua (freshwater)            |  | 0,00362 mg/l  |  |               |  |
| Dicyclohexyl phthalate<br>84-61-7  | aqua (marine water)          |  | 0,000362 mg/l |  |               |  |
| Dicyclohexyl phthalate<br>84-61-7  | aqua (intermittent releases) |  | 0,0362 mg/l   |  |               |  |
| Dicyclohexyl phthalate<br>84-61-7  | sediment (freshwater)        |  |               |  | 1,06 mg/kg    |  |
| Dicyclohexyl phthalate<br>84-61-7  | sediment (marine water)      |  |               |  | 0,106 mg/kg   |  |
| Dicyclohexyl phthalate<br>84-61-7  | sewage treatment plant (STP) |  | 10 mg/l       |  |               |  |
| Dicyclohexyl phthalate<br>84-61-7  | Soil                         |  |               |  | 0,21 mg/kg    |  |
| Dibenzoyl peroxide<br>94-36-0  | aqua (freshwater)            |  | 0,000602 mg/l |  |               |  |
| Dibenzoyl peroxide<br>94-36-0  | aqua (marine water)          |  | 0,00006 mg/l  |  |               |  |
| Dibenzoyl peroxide<br>94-36-0  | aqua (intermittent releases) |  | 0,000602 mg/l |  |               |  |
| Dibenzoyl peroxide<br>94-36-0  | sewage treatment plant (STP) |  | 0,35 mg/l     |  |               |  |
| Dibenzoyl peroxide<br>94-36-0  | sediment (freshwater)        |  |               |  | 0,338 mg/kg   |  |
| Dibenzoyl peroxide<br>94-36-0  | Soil                         |  |               |  | 0,0758 mg/kg  |  |
| Dibenzoyl peroxide<br>94-36-0  | oral                         |  |               |  | 6,67 mg/kg    |  |
| Hydroquinone<br>123-31-9   | aqua (freshwater)            |  | 0,00057 mg/l  |  |               |  |
| Hydroquinone<br>123-31-9   | aqua (marine water)          |  | 0,000057 mg/l |  |               |  |
| Hydroquinone<br>123-31-9   | sediment (freshwater)        |  |               |  | 0,0049 mg/kg  |  |
| Hydroquinone<br>123-31-9   | sediment (marine water)      |  |               |  | 0,00049 mg/kg |  |
| Hydroquinone<br>123-31-9   | aqua (intermittent releases) |  | 0,00134 mg/l  |  |               |  |
| Hydroquinone<br>123-31-9   | Soil                         |  |               |  | 0,00064 mg/kg |  |
| Hydroquinone<br>123-31-9   | sewage treatment plant (STP) |  | 0,71 mg/l     |  |               |  |

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

| Name on list   | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value                   | Remarks |
|--|--------------------|-------------------|--|---------------|-------------------------|---------|
| Isobornyl acrylate<br>5888-33-5  | Workers            | dermal            | Long term exposure - systemic effects        |               | 1,39 mg/kg              |         |
| Isobornyl acrylate<br>5888-33-5  | General population | oral              | Long term exposure - systemic effects        |               | 0,83 mg/kg              |         |
| Isobornyl acrylate<br>5888-33-5  | General population | dermal            | Long term exposure - systemic effects        |               | 0,83 mg/kg              |         |
| Bis(4-tert-butylcyclohexyl) peroxydicarbonate<br>15520-11-3  | Workers            | inhalation        | Long term exposure - systemic effects        |               | 5,87 mg/m <sup>3</sup>  |         |
| Bis(4-tert-butylcyclohexyl) peroxydicarbonate<br>15520-11-3  | Workers            | dermal            | Long term exposure - systemic effects        |               | 16,67 mg/kg             |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | Workers            | dermal            | Acute/short term exposure - systemic effects |               | 8,33 mg/kg              |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | Workers            | Inhalation        | Acute/short term exposure - systemic effects |               | 12,25 mg/m <sup>3</sup> |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | Workers            | dermal            | Long term exposure - systemic effects        |               | 8,33 mg/kg              |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 12,25 mg/m <sup>3</sup> |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | dermal            | Acute/short term exposure - systemic effects |               | 3,571 mg/kg             |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | dermal            | Long term exposure - systemic effects        |               | 3,571 mg/kg             |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | oral              | Acute/short term exposure - systemic effects |               | 0,75 mg/kg              |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | oral              | Long term exposure - systemic effects        |               | 0,75 mg/kg              |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | inhalation        | Acute/short term exposure - systemic effects |               | 0,75 mg/m <sup>3</sup>  |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | inhalation        | Long term exposure - systemic effects        |               | 0,75 mg/m <sup>3</sup>  |         |
| Diphenylether<br>101-84-8  | Workers            | inhalation        | Long term exposure - systemic effects        |               | 59 mg/m <sup>3</sup>    |         |
| Diphenylether<br>101-84-8  | Workers            | inhalation        | Long term exposure - local effects           |               | 7 mg/m <sup>3</sup>     |         |
| Diphenylether<br>101-84-8  | Workers            | inhalation        | Acute/short term exposure - local effects    |               | 14 mg/m <sup>3</sup>    |         |
| Diphenylether<br>101-84-8  | Workers            | dermal            | Long term exposure - systemic effects        |               | 25 mg/kg                |         |
| Dicyclohexyl phthalate<br>84-61-7  | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 35,2 mg/m <sup>3</sup>  |         |
| Dicyclohexyl phthalate   | Workers            | Inhalation        | Acute/short term                             |               | 35,2 mg/m <sup>3</sup>  |         |

|                                   |                    |            |  |  |                         |  |
|-----------------------------------|--------------------|------------|--|--|-------------------------|--|
| 84-61-7                           |                    |            | exposure - systemic effects                  |  |                         |  |
| Dicyclohexyl phthalate<br>84-61-7 | Workers            | dermal     | Long term exposure - systemic effects        |  | 0,5 mg/kg               |  |
| Dicyclohexyl phthalate<br>84-61-7 | Workers            | dermal     | Acute/short term exposure - systemic effects |  | 0,5 mg/kg               |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | Inhalation | Long term exposure - systemic effects        |  | 0,87 mg/m <sup>3</sup>  |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | Inhalation | Acute/short term exposure - systemic effects |  | 0,87 mg/m <sup>3</sup>  |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | dermal     | Long term exposure - systemic effects        |  | 0,25 mg/kg              |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | dermal     | Acute/short term exposure - systemic effects |  | 0,25 mg/kg              |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | oral       | Acute/short term exposure - systemic effects |  | 0,25 mg/kg              |  |
| Dicyclohexyl phthalate<br>84-61-7 | General population | oral       | Long term exposure - systemic effects        |  | 0,25 mg/kg              |  |
| Dibenzoyl peroxide<br>94-36-0     | Workers            | Inhalation | Long term exposure - systemic effects        |  | 11,75 mg/m <sup>3</sup> |  |
| Dibenzoyl peroxide<br>94-36-0     | Workers            | dermal     | Long term exposure - systemic effects        |  | 6,6 mg/kg               |  |
| Dibenzoyl peroxide<br>94-36-0     | General population | Inhalation | Long term exposure - systemic effects        |  | 2,9 mg/m <sup>3</sup>   |  |
| Dibenzoyl peroxide<br>94-36-0     | General population | dermal     | Long term exposure - systemic effects        |  | 3,3 mg/kg               |  |
| Dibenzoyl peroxide<br>94-36-0     | General population | oral       | Long term exposure - systemic effects        |  | 1,65 mg/kg              |  |
| Hydroquinone<br>123-31-9          | Workers            | dermal     | Long term exposure - systemic effects        |  | 3,33 mg/kg              |  |
| Hydroquinone<br>123-31-9          | Workers            | inhalation | Long term exposure - systemic effects        |  | 2,1 mg/m <sup>3</sup>   |  |
| Hydroquinone<br>123-31-9          | General population | dermal     | Long term exposure - systemic effects        |  | 1,66 mg/kg              |  |
| Hydroquinone<br>123-31-9          | General population | inhalation | Long term exposure - systemic effects        |  | 1,05 mg/m <sup>3</sup>  |  |
| Hydroquinone<br>123-31-9          | General population | oral       | Long term exposure - systemic effects        |  | 0,6 mg/kg               |  |

**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                                   | paste<br>red                       |
| Odor   | Slight                             |
| Odour threshold                              | No data available / Not applicable |
| pH   | No data available / 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 °C (> 199.4 °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                                      | No data available / Not applicable |
| Bulk density                                 | No data available / Not applicable |
| Solubility                                   | No data available / Not applicable |
| Solubility (qualitative)<br>(Solvent: Water) | Slightly soluble                   |
| 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                                    | No data available / Not applicable |
| 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

Reaction with strong acids.  
Reacts with strong oxidants.

### 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.

## 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  |
|--|---------------|---------------|---------|---|
| Isobornyl acrylate<br>5888-33-5  | LD50          | 4.350 mg/kg   | rat     | not specified   |
| t-<br>Butylcyclohexylpercarbon<br>ate<br>15520-11-3  | LD50          | > 5.000 mg/kg | rat     | equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 420 (Acute Oral Toxicity)                          |
| Diphenylether<br>101-84-8  | LD50          | > 5.000 mg/kg | rat     | OECD Guideline 401 (Acute Oral Toxicity)                          |
| Dicyclohexyl phthalate<br>84-61-7  | LD50          | > 5.000 mg/kg | rat     | EU Method B.1 (Acute Toxicity (Oral))                             |
| Dibenzoyl peroxide<br>94-36-0  | LD50          | > 5.000 mg/kg | rat     | not specified   |
| Hydroquinone<br>123-31-9   | LD50          | 367 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<br>CAS-No.  | Value<br>type | Value         | Species | Method                                     |
|--|---------------|---------------|---------|--|
| Isobornyl acrylate<br>5888-33-5  | LD50          | > 3.000 mg/kg | rabbit  | other guideline:                           |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Dicyclohexyl phthalate<br>84-61-7  | LD50          | > 2.000 mg/kg | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |
| Hydroquinone<br>123-31-9   | LD50          | > 2.000 mg/kg | rabbit  | 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        |
|---------------------------------|---------------|-------------|-----------------|------------------|---------|---------------|
| Dibenzoyl peroxide<br>94-36-0   | LC50          | > 24,3 mg/l | vapour          | 4 h              | rat     | not specified |

**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   |
|--|--------------------------|------------------|---------|--|
| Isobornyl acrylate<br>5888-33-5  | irritating               |                  | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | moderately<br>irritating | 24 h             | rabbit  | Draize Test  |
| Diphenylether<br>101-84-8  | not irritating           |                  | rabbit  | other guideline:   |
| Hydroquinone<br>123-31-9   | not irritating           | 24 h             | rabbit  | Weight of evidence                                       |

**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  |
|--|----------------|------------------|---------|---|
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | not 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.

| Hazardous substances<br>CAS-No.  | Result      | Test type                             | Species    | Method   |
|--|-------------|---------------------------------------|------------|--|
| Isobornyl acrylate<br>5888-33-5  | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation:<br>Local Lymph Node Assay)                             |
| Tris(2-acryloxyethyl)<br>isocyanurate<br>40220-08-4  | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation:<br>Local Lymph Node Assay)                             |
| t-<br>Butylcyclohexylpercarbon<br>ate<br>15520-11-3  | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation:<br>Local Lymph Node Assay)                             |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation:<br>Local Lymph Node Assay)                             |
| Dicyclohexyl phthalate<br>84-61-7  | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 442B (Skin<br>Sensitization)  |
| Dibenzoyl peroxide<br>94-36-0  | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation:<br>Local Lymph Node Assay)                             |
| Hydroquinone<br>123-31-9   | sensitising | Guinea pig maximisation<br>test       | guinea pig | equivalent or similar to OECD Guideline<br>406 (Skin Sensitisation)                            |
| Hydroquinone<br>123-31-9   | sensitising | Mouse local lymphnode<br>assay (LLNA) | mouse      | equivalent or similar to OECD Guideline<br>429 (Skin Sensitisation: Local Lymph<br>Node Assay) |

**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>  |
|--|---------------|--|---|----------------|--|
| Isobornyl acrylate<br>5888-33-5  | negative      | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                                    |                | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)  |
| Isobornyl acrylate<br>5888-33-5  | negative      | mammalian cell<br>gene mutation assay                  | with and without                                    |                | OECD Guideline 476 (In vitro<br>Mammalian Cell Gene<br>Mutation Test)                                      |
| Isobornyl acrylate<br>5888-33-5  | negative      | mammalian cell<br>gene mutation assay                  | with and without                                    |                | OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test)                                   |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | negative      | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                                    |                | OECD Guideline 472 (Genetic<br>Toxicology: Escherichia coli,<br>Reverse Mutation Assay)                    |
| Hydroquinone<br>123-31-9   | negative      | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                                    |                | equivalent or similar to OECD<br>Guideline 471 (Bacterial<br>Reverse Mutation Assay)                       |
| Hydroquinone<br>123-31-9   | negative      | in vitro mammalian<br>chromosome<br>aberration test    | with and without                                    |                | OECD Guideline 473 (In vitro<br>Mammalian Chromosome<br>Aberration Test)                                   |
| Hydroquinone<br>123-31-9   | positive      | mammalian cell<br>gene mutation assay                  | with and without                                    |                | OECD Guideline 476 (In vitro<br>Mammalian Cell Gene<br>Mutation Test)                                      |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | negative      | oral: gavage   |   | mouse          | not specified  |
| Hydroquinone<br>123-31-9   | positive      | intraperitoneal  |   | mouse          | equivalent or similar to OECD<br>Guideline 474 (Mammalian<br>Erythrocyte Micronucleus<br>Test)             |
| Hydroquinone<br>123-31-9   | negative      | oral: gavage   |   | rat            | equivalent or similar to OECD<br>Guideline 478 (Genetic<br>Toxicology: Rodent Dominant<br>Lethal Test)     |
| Hydroquinone<br>123-31-9   | positive      | intraperitoneal  |   | mouse          | equivalent or similar to OECD<br>Guideline 483 (Mammalian<br>Spermatogonial Chromosome<br>Aberration Test) |

**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   |
|---|------------------|----------------------|--|---------|-------------|--|
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700) 25068-38-6 | not carcinogenic | dermal               | 2 y daily                              | mouse   | male        | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)                       |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700) 25068-38-6 | not carcinogenic | oral: gavage         | 2 y daily                              | rat     | male/female | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)                       |
| Hydroquinone 123-31-9   | carcinogenic     | oral: gavage         | 103 w 5 d/w                            | rat     | male/female | equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Hydroquinone 123-31-9   | carcinogenic     | oral: gavage         | 103 w 5 d/w                            | mouse   | female      | equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

**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   |
|---|---|----------------------|----------------------|---------|--|
| Isobornyl acrylate 5888-33-5  | NOAEL P 100 mg/kg<br>NOAEL F1 100 mg/kg   |                      | oral: gavage         | rat     | OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700) 25068-38-6 | NOAEL P $\geq$ 50 mg/kg<br>NOAEL F1 $\geq$ 750 mg/kg<br>NOAEL F2 $\geq$ 750 mg/kg | Two generation study | oral: gavage         | rat     | OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)  |
| Hydroquinone 123-31-9   | NOAEL P 15 mg/kg<br>NOAEL F1 150 mg/kg<br>NOAEL F2 150 mg/kg                      | Two generation study | oral: gavage         | rat     | EPA OTS 798.4700 (Reproduction and Fertility Effects)  |

**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  |
|--|-------------------|-------------------------|--|---------|---|
| Isobornyl acrylate<br>5888-33-5  | 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) |
| reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight≤700)<br>25068-38-6 | NOAEL 50 mg/kg    | oral: gavage            | 14 w<br>daily                                | rat     | OECD Guideline 408<br>(Repeated Dose 90-Day<br>Oral Toxicity in Rodents)  |
| Diphenylether<br>101-84-8  | NOAEL > 301 mg/kg | oral: feed              | 13 w<br>daily                                | rat     | OECD Guideline 408<br>(Repeated Dose 90-Day<br>Oral Toxicity in Rodents)  |
| Diphenylether<br>101-84-8  | NOAEL > 335 mg/kg | oral: feed              | 13 w<br>daily                                | rat     | OECD Guideline 408<br>(Repeated Dose 90-Day<br>Oral Toxicity in Rodents)  |
| Hydroquinone<br>123-31-9   | NOAEL 50 mg/kg    | oral: gavage            | 13 w<br>5 d/w                                | rat     | not specified   |
| Hydroquinone<br>123-31-9   | NOAEL 73,9 mg/kg  | dermal                  | 13 w<br>6 h/d, 5 d/w                         | rat     | equivalent or similar to<br>OECD Guideline 411<br>(Subchronic Dermal<br>Toxicity: 90-Day Study)   |

**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   |
|---|---------------|------------|---------------|---------------------|--|
| Isobornyl acrylate<br>5888-33-5   | LC50          | 0,704 mg/l | 96 h          | Danio rerio         | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700)<br>25068-38-6 | LC50          | 1,75 mg/l  | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Diphenylether<br>101-84-8   | LC50          | 4,2 mg/l   | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Dicyclohexyl phthalate<br>84-61-7   | LC50          |            |               | Oryzias latipes     | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Dibenzoyl peroxide<br>94-36-0   | LC50          | 0,06 mg/l  | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Hydroquinone<br>123-31-9  | LC50          | 0,638 mg/l | 96 h          | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute 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   |
|---|---------------|------------|---------------|---------------|--|
| Isobornyl acrylate<br>5888-33-5   | EC50          | 1 mg/l     | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Tris(2-acryloxyethyl) isocyanurate<br>40220-08-4  | EC50          | 158,3 mg/l | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | EC50          |            | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700)<br>25068-38-6 | EC50          | 1,7 mg/l   | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Diphenylether<br>101-84-8   | EC50          | 1,7 mg/l   | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Dibenzoyl peroxide<br>94-36-0   | EC50          | 0,11 mg/l  | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Hydroquinone<br>123-31-9  | EC50          | 0,134 mg/l | 48 h          | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute 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                                      |
|---|---------------|------------|---------------|---------------|---|
| Isobornyl acrylate<br>5888-33-5   | NOEC          | 0,092 mg/l | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight≤700)<br>25068-38-6 | NOEC          | 0,3 mg/l   | 21 d          | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Dicyclohexyl phthalate  | NOEC          | 0,181 mg/l | 21 d          | Daphnia magna | OECD 211 (Daphnia                           |

|                               |      |             |      |               |   |
|-------------------------------|------|-------------|------|---------------|---|
| 84-61-7                       |      |             |      |               | magna, Reproduction Test)                   |
| Dibenzoyl peroxide<br>94-36-0 | EC10 | 0,001 mg/l  | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Hydroquinone<br>123-31-9      | NOEC | 0,0057 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  |
|---|---------------|------------|---------------|---|---|
| Isobornyl acrylate<br>5888-33-5   | NOEC          | 0,405 mg/l | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Isobornyl acrylate<br>5888-33-5   | EC50          | 1,98 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Tris(2-acryloxyethyl)<br>isocyanurate<br>40220-08-4   | EC50          | 25,7 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Tris(2-acryloxyethyl)<br>isocyanurate<br>40220-08-4   | EC10          | 12,9 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | EC50          |            | 72 h          | Desmodesmus subspicatus   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | NOEC          |            | 72 h          | Desmodesmus subspicatus   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin<br>(number average molecular<br>weight≤700)<br>25068-38-6 | EC50          | > 11 mg/l  | 72 h          | Scenedesmus capricornutum   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin<br>(number average molecular<br>weight≤700)<br>25068-38-6 | NOEC          | 4,2 mg/l   | 72 h          | Scenedesmus capricornutum   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Diphenylether<br>101-84-8   | EC50          | 0,58 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Diphenylether<br>101-84-8   | NOEC          | 0,32 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Dicyclohexyl phthalate<br>84-61-7   | EC50          |            |               | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Dibenzoyl peroxide<br>94-36-0   | ErC50         | 0,071 mg/l | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Dibenzoyl peroxide<br>94-36-0   | NOEC          | 0,02 mg/l  | 72 h          | Pseudokirchneriella subcapitata   | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Hydroquinone<br>123-31-9  | EC50          | 0,335 mg/l | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata) | OECD Guideline 201 (Alga, Growth 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   |
|---|---------------|------------|---------------|--|--|
| reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin<br>(number average molecular<br>weight≤700)<br>25068-38-6 | IC50          | > 100 mg/l | 3 h           | activated sludge, industrial                           | other guideline:   |
| Diphenylether<br>101-84-8   | EC50          | > 100 mg/l | 3 h           | activated sludge of a<br>predominantly domestic sewage | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test) |
| Dibenzoyl peroxide<br>94-36-0   | EC 50         | 35 mg/l    | 3 h           |  | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test) |
| Hydroquinone<br>123-31-9  | EC 50         | 0,038 mg/l | 30 min        |  | not specified  |

**12.2. Persistence and degradability**

The product is not biodegradable.

| Hazardous substances<br>CAS-No.   | Result                     | Test type | Degradability | Exposure time | Method   |
|---|----------------------------|-----------|---------------|---------------|--|
| Isobornyl acrylate<br>5888-33-5   | not readily biodegradable. | aerobic   | 57 %          | 28 d          | OECD Guideline 310 (Ready Biodegradability CO <sub>2</sub> in Sealed Vessels (Headspace Test)) |
| Tris(2-acryloxyethyl) isocyanurate<br>40220-08-4  | not readily biodegradable. | aerobic   | 14,5 %        | 28 d          | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)                    |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | not readily biodegradable. | aerobic   | 3 %           | 28 d          | OECD Guideline 301 B (Ready Biodegradability: CO <sub>2</sub> Evolution Test)                  |
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)<br>25068-38-6 | not readily biodegradable. | aerobic   | 5 %           | 28 d          | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)                    |
| Diphenylether<br>101-84-8   | readily biodegradable      | aerobic   | 76 %          | 20 d          | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)                              |
| Dicyclohexyl phthalate<br>84-61-7   | readily biodegradable      | aerobic   | 68,5 %        | 28 d          | not specified  |
| Dibenzoyl peroxide<br>94-36-0   | readily biodegradable      | aerobic   | 71 %          | 28 d          | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)                              |
| Hydroquinone<br>123-31-9  | readily biodegradable      | aerobic   | 75 - 81 %     | 30 d          | EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)             |

**12.3. Bioaccumulative potential**

No data available.

| Hazardous substances<br>CAS-No.   | Bioconcentration factor (BCF) | Exposure time | Temperature | Species   | Method  |
|-----------------------------------|-------------------------------|---------------|-------------|---|---|
| Isobornyl acrylate<br>5888-33-5   | 37                            | 56 h          | 24 °C       | Danio rerio                                     | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |
| Diphenylether<br>101-84-8         | 470                           | 7 d           |             | Salmo gairdneri (new name: Oncorhynchus mykiss) | not specified   |
| Dicyclohexyl phthalate<br>84-61-7 | 85                            |               |             |   | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |
| Dibenzoyl peroxide<br>94-36-0     | 66,6                          |               |             | fish  | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |

**12.4. Mobility in soil**

Cured adhesives are immobile.

| Hazardous substances<br>CAS-No.   | LogPow | Temperature | Method  |
|---|--------|-------------|---|
| Isobornyl acrylate<br>5888-33-5   | 4,52   |             | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Tris(2-acryloxyethyl)<br>isocyanurate<br>40220-08-4   | 1,85   | 25 °C       | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | 8,34   |             | QSAR (Quantitative Structure Activity Relationship)                         |
| reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin<br>(number average molecular<br>weight≤700)<br>25068-38-6 | 3,242  | 25 °C       | EU Method A.8 (Partition Coefficient)                                       |
| Diphenylether<br>101-84-8   | 4,24   |             | EU Method A.8 (Partition Coefficient)                                       |
| Dicyclohexyl phthalate<br>84-61-7   | 4,82   | 25 °C       | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Dibenzoyl peroxide<br>94-36-0   | 3,2    | 22 °C       | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Hydroquinone<br>123-31-9  | 0,59   |             | EU Method A.8 (Partition Coefficient)                                       |

### 12.5. Results of PBT and vPvB assessment

| Hazardous substances<br>CAS-No.   | PBT / vPvB  |
|---|---|
| Isobornyl acrylate<br>5888-33-5   | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| t-Butylcyclohexylpercarbonate<br>15520-11-3   | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| reaction product: bisphenol-A-(epichlorhydrin);<br>epoxy resin (number average molecular<br>weight≤700)<br>25068-38-6 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Dicyclohexyl phthalate<br>84-61-7   | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Dibenzoyl peroxide<br>94-36-0   | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Hydroquinone<br>123-31-9  | 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:

Dispose of in accordance with local and national regulations.

Collection and delivery to recycling enterprise or other registered elimination institution.

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.

|  |
|--|
| <b>SECTION 14: Transport information</b> |
|--|

**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. (Isobornyl acrylate) |
| RID  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate) |
| ADN  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate) |
| IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate) |
| IATA | Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate) |

**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), 197 (IATA), 969 (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**

VOC content < 3 %  
(2010/75/EC)

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK: WGK = 3, highly water endangering mixture. Classification according to the mixture rules in German AwSV regulation annex 1, number 5.2 from 18. April 2017.

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:

H241 Heating may cause a fire or explosion.  
H242 Heating may cause a fire.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H341 Suspected of causing genetic defects.  
H351 Suspected of causing cancer.  
H360D May damage the unborn child.  
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.  
H413 May cause long lasting harmful effects to aquatic life.

**Further information:**

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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.

**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.**