



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

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TEROSON VR 1520

SDS No. : 334754

V007.1

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Replaces version from: 13.02.2017

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

#### 1.1. Product identifier

TEROSON VR 1520

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

Intended use:

Finish Resin

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

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

Fax-no.: +44 (1442) 278071

ua-productsafety.uk@henkel.com

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

### 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.                  |            |
| Specific target organ toxicity - single exposure           | Category 3 |
| H335 May cause respiratory irritation.                     |            |
| Target organ: respiratory tract irritation                 |            |
| Acute hazards to the aquatic environment                   | Category 1 |
| H400 Very toxic to aquatic life.                           |            |
| Chronic hazards to the aquatic environment                 | Category 1 |
| H410 Very toxic to aquatic life with long lasting effects. |            |

#### 2.2. Label elements

##### Label elements (CLP):

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

2-Hydroxyethyl methacrylate

Isobornyl acrylate

**Signal word:**

Warning

**Hazard statement:**

H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statement:  
Prevention**

P261 Avoid breathing mist/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/eye protection.

**2.3. Other hazards**

Persons suffering from allergic reactions to acrylates should avoid contact with the product.

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

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

Adhesive

**Base substances of preparation:**

Acrylate

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

| Hazardous components<br>CAS-No.              | EC Number<br>REACH-RegNo.     | content  | Classification                                                                                                                                      |
|----------------------------------------------|-------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Isobornyl acrylate<br>5888-33-5              | 227-561-6<br>01-2119957862-25 | 25- 50 % | 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 |
| 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                                                                               |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | 231-272-0<br>01-2119472306-39 | 1- 2 %   | Aquatic Chronic 3<br>H412<br>Acute Tox. 4; Oral<br>H302                                                                                             |

**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, consult doctor if complaint persists.

Skin contact:

IF ON SKIN: Wash with plenty of soap and water.

In case of adverse health effects seek medical advice.

Eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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:**

All common extinguishing agents are suitable.

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

High pressure waterjet

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

In case of fire toxic gases can be released.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

## SECTION 6: Accidental release measures

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

Wear protective equipment.

Avoid contact with skin and eyes.

Keep unprotected persons away.

Danger of slipping on spilled product.

### 6.2. Environmental precautions

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

Inform authorities in the event of product spillage to water courses or sewage systems.

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

Remove with liquid-absorbing material (sand, peat, sawdust).

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**

Hygiene measures:

- Wash hands before work breaks and after finishing work.
- Do not eat, drink or smoke while working.
- Take off contaminated clothing and wash before reuse.

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

- Ensure good ventilation/extraction.
- Store in a cool place in closed original container.
- Keep away from heat and direct sunlight.
- Keep container tightly sealed.
- Do not expose to direct heat.

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

Finish Resin

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

Valid for  
Great Britain

None

**Occupational Exposure Limits**

Valid for  
Ireland

None

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

| Name on list                                 | Environmental<br>Compartment       | Exposure<br>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                           |                    |                  |     |                   |        |         |
| 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                           |                    |                  |     |                   |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | aqua<br>(freshwater)               |                    | 0,00195<br>mg/l  |     |                   |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | aqua (marine<br>water)             |                    | 0,000195<br>mg/l |     |                   |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | aqua<br>(intermittent<br>releases) |                    | 0,0195<br>mg/l   |     |                   |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | sediment<br>(freshwater)           |                    |                  |     | 0,00514<br>mg/kg  |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | sediment<br>(marine water)         |                    |                  |     | 0,000514<br>mg/kg |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | Soil                               |                    |                  |     | 0,000674<br>mg/kg |        |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | sewage<br>treatment plant<br>(STP) |                    | 45 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 |         |
| 2-Hydroxyethyl methacrylate<br>868-77-9      | Workers            | dermal            | Long term exposure - systemic effects        |               | 1,3 mg/kg  |         |
| 2-Hydroxyethyl methacrylate<br>868-77-9      | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 4,9 mg/m3  |         |
| 2-Hydroxyethyl methacrylate<br>868-77-9      | General population | dermal            | Long term exposure - systemic effects        |               | 0,83 mg/kg |         |
| 2-Hydroxyethyl methacrylate<br>868-77-9      | General population | Inhalation        | Long term exposure - systemic effects        |               | 2,9 mg/m3  |         |
| 2-Hydroxyethyl methacrylate<br>868-77-9      | General population | oral              | Long term exposure - systemic effects        |               | 0,83 mg/kg |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | Workers            | Inhalation        | Acute/short term exposure - systemic effects |               | 3,5 mg/m3  |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 3,5 mg/m3  |         |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | Workers            | dermal            | Long term exposure - systemic effects        |               | 1,25 mg/kg |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Use only in well ventilated areas.

Respiratory protection:

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).

This recommendation should be matched to local conditions.

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to &gt; 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 &gt; 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:  
Goggles which can be tightly sealed.  
Protective eye equipment should conform to EN166.

Skin protection:  
Wear protective equipment.  
Protective clothing that covers arms and legs.  
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:  
Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway).  
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>colourless         |
| Odor                                                        | characteristic                         |
| Odour threshold                                             | No data available / Not applicable     |
| pH                                                          | Not available.                         |
| Melting point                                               | No data available / Not applicable     |
| Solidification temperature                                  | No data available / Not applicable     |
| Initial boiling point                                       | No data available / Not applicable     |
| Flash point                                                 | ; no methodNo flash point up to 100 °C |
| 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<br>(20 °C (68 °F))                                  | 1,1 g/cm3                              |
| Bulk density                                                | No data available / Not applicable     |
| Solubility                                                  | No data available / Not applicable     |
| Solubility (qualitative)<br>(20 °C (68 °F); Solvent: Water) | Not miscible or difficult to mix       |
| 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<br>(; 20 °C (68 °F))                              | 1.000 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

None if used for intended purpose.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

**10.4. Conditions to avoid**

None if used for intended purpose.

**10.5. Incompatible materials**

None if used properly.

**10.6. Hazardous decomposition products**

No decomposition if used according to specifications.

## SECTION 11: Toxicological information

**General toxicological information:**

Persons suffering from allergic reactions to acrylates should avoid contact with the product.

**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                            |
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9         | LD50          | > 5.000 mg/kg | rat     | not specified                            |
| 2-Hydroxy-2-<br>methylpropionophenone<br>7473-98-5 | LD50          | 1.694 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:                           |
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9         | LD50          | > 5.000 mg/kg | rabbit  | not specified                              |
| 2-Hydroxy-2-<br>methylpropionophenone<br>7473-98-5 | LD50          | 6.929 mg/kg   | rat     | OECD Guideline 402 (Acute Dermal Toxicity) |

**Acute inhalative toxicity:**

No data available.

**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) |
| 2-Hydroxy-2-<br>methylpropionophenone<br>7473-98-5 | not irritating | 24 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 methacrylate<br>868-77-9      | irritating     |                  | rabbit  | Draize Test                                           |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | 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 assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | not sensitising | Guinea pig maximisation test       | guinea pig | OECD Guideline 406 (Skin Sensitisation)                         |

**Germ cell mutagenicity:**

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

| Hazardous substances<br>CAS-No.              | Result   | Type of study/<br>Route of<br>administration     | Metabolic<br>activation/<br>Exposure time | Species | Method                                                                            |
|----------------------------------------------|----------|--------------------------------------------------|-------------------------------------------|---------|-----------------------------------------------------------------------------------|
| Isobornyl acrylate<br>5888-33-5              | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                          |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                             |
| Isobornyl acrylate<br>5888-33-5              | negative | mammalian cell gene mutation assay               | with and without                          |         | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                   |
| Isobornyl acrylate<br>5888-33-5              | negative | mammalian cell gene mutation assay               | with and without                          |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                |
| 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) |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                          |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)                             |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | negative | in vitro mammalian chromosome aberration test    | with and without                          |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                |
| 2-Hydroxy-2-methylpropiophenone<br>7473-98-5 | 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 | oral: gavage                                     |                                           | rat     | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)                      |

**Carcinogenicity**

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

| Hazardous components<br>CAS-No.            | Result | Route of<br>application | Exposure<br>time /<br>Frequency<br>of treatment | Species | Sex    | Method                                             |
|--------------------------------------------|--------|-------------------------|-------------------------------------------------|---------|--------|----------------------------------------------------|
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9 |        | inhalation              | 102 weeks<br>6 hours/day,<br>5 days/week        | rat     | female | OECD Guideline 451<br>(Carcinogenicity<br>Studies) |

**Reproductive toxicity:**

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

| Hazardous substances<br>CAS-No.            | Result / Value                                    | Test type | Route of<br>application | Species | Method                                                                                                                                  |
|--------------------------------------------|---------------------------------------------------|-----------|-------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Isobornyl acrylate<br>5888-33-5            | NOAEL P 100 mg/kg<br>NOAEL F1 100 mg/kg           |           | oral: gavage            | rat     | OECD Guideline 422<br>(Combined Repeated Dose<br>Toxicity Study with the<br>Reproduction /<br>Developmental Toxicity<br>Screening Test) |
| 2-Hydroxyethyl<br>methacrylate<br>868-77-9 | NOAEL P >= 1.000 mg/kg<br>NOAEL F1 >= 1.000 mg/kg | screening | oral: gavage            | rat     | OECD Combined Repeated<br>Dose and Reproductive /<br>Developmental Toxicity<br>Screening Test (Precursor<br>Protocol of GL 422)         |

**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) |
| 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) |
| 2-Hydroxy-2-<br>methylpropiophenone<br>7473-98-5 | NOAEL 50 mg/kg  | oral: gavage            | 92-93 d<br>daily                             | rat     | OECD Guideline 408<br>(Repeated Dose 90-Day<br>Oral Toxicity in Rodents)                                                                |

**Aspiration hazard:**

No data available.

## SECTION 12: Ecological information

### General ecological information:

Do not empty into drains, soil or bodies of 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,<br>Acute Toxicity Test) |
| 2-Hydroxyethyl methacrylate<br>868-77-9            | LC50          | > 100 mg/l | 96 h          | Oryzias latipes | OECD Guideline 203 (Fish,<br>Acute Toxicity Test) |
| 2-Hydroxy-2-<br>methylpropionophenone<br>7473-98-5 | LC50          | 160 mg/l   | 48 h          | Leuciscus idus  | OECD Guideline 203 (Fish,<br>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<br>(Daphnia sp. Acute<br>Immobilisation Test) |
| 2-Hydroxyethyl methacrylate<br>868-77-9            | EC50          | 380 mg/l   | 48 h          | Daphnia magna | OECD Guideline 202<br>(Daphnia sp. Acute<br>Immobilisation Test) |
| 2-Hydroxy-2-<br>methylpropionophenone<br>7473-98-5 | EC50          | > 119 mg/l | 48 h          | Daphnia magna | OECD Guideline 202<br>(Daphnia sp. Acute<br>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<br>magna, Reproduction Test) |
| 2-Hydroxyethyl methacrylate<br>868-77-9 | NOEC          | 24,1 mg/l  | 21 d          | Daphnia magna | OECD 211 (Daphnia<br>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) |
| 2-Hydroxyethyl methacrylate<br>868-77-9        | EC50          | 836 mg/l   | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-Hydroxyethyl methacrylate<br>868-77-9        | NOEC          | 400 mg/l   | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-Hydroxy-2-methylpropionophenone<br>7473-98-5 | EC50          | 1,95 mg/l  | 72 h          | Desmodesmus subspicatus                                                  | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-Hydroxy-2-methylpropionophenone<br>7473-98-5 | NOEC          | 0,194 mg/l | 72 h          | Desmodesmus subspicatus                                                  | 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                                                             |
|------------------------------------------------|---------------|--------------|---------------|-------------------------|--------------------------------------------------------------------|
| 2-Hydroxyethyl methacrylate<br>868-77-9        | EC0           | > 3.000 mg/l | 16 h          | Pseudomonas fluorescens | other guideline:                                                   |
| 2-Hydroxy-2-methylpropionophenone<br>7473-98-5 | EC 50         | 3 mg/l       | 3 h           |                         | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

### 12.2. Persistence and degradability

| 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)) |
| 2-Hydroxyethyl methacrylate<br>868-77-9        | readily biodegradable      | aerobic   | 92 - 100 %    | 14 d          | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))                          |
| 2-Hydroxy-2-methylpropionophenone<br>7473-98-5 | readily biodegradable      | aerobic   | 90 %          | 28 d          | OECD Guideline 301 B (Ready Biodegradability: CO <sub>2</sub> Evolution Test)                  |

### 12.3. Bioaccumulative potential

| 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) |

### 12.4. Mobility in soil

| 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)        |
| 2-Hydroxyethyl methacrylate<br>868-77-9     | 0,42   | 25 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| 2-Hydroxy-2-methylpropiofenone<br>7473-98-5 | 1,62   | 25 °C       | 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                                                                                                             |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Isobornyl acrylate<br>5888-33-5             | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 2-Hydroxyethyl methacrylate<br>868-77-9     | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 2-Hydroxy-2-methylpropiofenone<br>7473-98-5 | 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:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

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.  
080409

## 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. (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<br>(VOCV 814.018 VOC regulation<br>CH) | 0 % |
| VOC content<br>(2010/75/EU)                        | 0 % |

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**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.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
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.

**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.**