



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

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Loctite 330

sds no. : 416828  
V002.1

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

#### 1.1. Product identifier

Loctite 330

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

Intended use:

Acrylic Adhesive

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

Henkel Limited

2 Bishop Square Business Park

AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933

Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

### SECTION 2: Hazards identification

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

##### Classification (DPD):

Xi - Irritant

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

Sensitizing

R43 May cause sensitisation by skin contact.

Dangerous for the environment

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 2.2. Label elements

**Label elements (DPD):**

|| Xi - Irritant



**Risk phrases:**

|| R41 Risk of serious damage to eyes.  
|| R37/38 Irritating to respiratory system and skin.  
|| R43 May cause sensitisation by skin contact.  
|| R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:**

|| S24/25 Avoid contact with skin and eyes.  
|| S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
|| S28 After contact with skin, wash immediately with plenty of water and soap.  
|| S37/39 Wear suitable gloves and eye/face protection.  
|| S51 Use only in well-ventilated areas.  
|| S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Additional labeling:**

Contains epoxy constituents. See information supplied by the manufacturer.  
For use in industrial installations only.

**Contains:**

Methacrylic acid,  
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

**2.3. Other hazards**

Non corrosive to skin in accordance with the invitro test method, B40 skin corrosion - Human skin model assay, specified in Part B of Annex V to Directive 67/548/EEC.

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

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

| Hazardous components<br>CAS-No.                                                                                           | EC Number<br>REACH-Reg No.                 | content          | Classification                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tetrahydrofurfuryl methacrylate<br>2455-24-5                                                                              | 219-529-5                                  | > 40- < 50 %     | Skin irritation 2; Dermal<br>H315<br>Serious eye irritation 2<br>H319<br>Specific target organ toxicity - single<br>exposure 3; Inhalation<br>H335                                                                                                                                                |
| Methacrylic acid<br>79-41-4                                                                                               | 201-204-4<br>01-2119463884-26              | > 1- < 10 %      | Acute toxicity 4; Oral<br>H302<br>Acute toxicity 3; Dermal<br>H311<br>Acute toxicity 4; Inhalation<br>H332<br>Skin corrosion/irritation 1A<br>H314                                                                                                                                                |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                     | 211-708-6                                  | > 1- < 10 %      | Serious eye irritation 2<br>H319<br>Specific target organ toxicity - single<br>exposure 3<br>H335<br>Skin irritation 2<br>H315                                                                                                                                                                    |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | 500-033-5<br>500-033-5<br>01-2119456619-26 | > 1- < 5 %       | Skin sensitizer 1<br>H317<br>Chronic hazards to the aquatic environment 2<br>H411<br>Serious eye irritation 2<br>H319<br>Skin irritation 2<br>H315                                                                                                                                                |
| 1-Methyltrimethylene dimethacrylate<br>1189-08-8                                                                          | 214-711-0                                  | > 1- < 5 %       | Serious eye irritation 2<br>H319<br>Specific target organ toxicity - single<br>exposure 3<br>H335<br>Skin irritation 2<br>H315                                                                                                                                                                    |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                    | 204-881-4<br>01-2119555270-46              | >= 0,25- < 2,5 % | Acute hazards to the aquatic environment 1<br>H400<br>Chronic hazards to the aquatic environment 1<br>H410                                                                                                                                                                                        |
| Cumene hydroperoxide<br>80-15-9                                                                                           | 201-254-7                                  | > 0,1- < 0,9 %   | Acute toxicity 4; Dermal<br>H312<br>Specific target organ toxicity - repeated<br>exposure 2<br>H373<br>Acute toxicity 3; Inhalation<br>H331<br>Acute toxicity 4; Oral<br>H302<br>Organic peroxides E<br>H242<br>Chronic hazards to the aquatic environment 2<br>H411<br>Skin corrosion 1B<br>H314 |
| Trichloroethane-1,1,2<br>79-00-5                                                                                          | 201-166-9                                  | > 0,05- < 0,2 %  | Carcinogenicity 2<br>H351<br>Acute toxicity 4; Dermal<br>H312<br>Acute toxicity 4; Inhalation<br>H332<br>Acute toxicity 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.**

**Declaration of ingredients according to DPD (EC) No 1999/45:**

| Hazardous components<br>CAS-No.                                                                                           | EC Number<br>REACH-Reg No.                 | content           | Classification                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Tetrahydrofurfuryl methacrylate<br>2455-24-5                                                                              | 219-529-5                                  | > 40 - < 50 %     | Xi - Irritant; R36/37/38                                                                                                                  |
| Methacrylic acid<br>79-41-4                                                                                               | 201-204-4<br>01-2119463884-26              | > 1 - < 10 %      | C - Corrosive; R35<br>Xn - Harmful; R20/21/22                                                                                             |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                     | 211-708-6                                  | > 1 - < 10 %      | Xi - Irritant; R36/37/38                                                                                                                  |
| Reaction product: bisphenol-A-<br>(epichlorhydrin); epoxy resin (number<br>average molecular weight <= 700)<br>25068-38-6 | 500-033-5<br>500-033-5<br>01-2119456619-26 | > 1 - < 5 %       | R43<br>Xi - Irritant; R36/38<br>N - Dangerous for the environment; R51/53                                                                 |
| 1-Methyltrimethylene dimethacrylate<br>1189-08-8                                                                          | 214-711-0                                  | > 1 - < 5 %       | Xi - Irritant; R36/37/38                                                                                                                  |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                    | 204-881-4<br>01-2119555270-46              | >= 0,25 - < 2,5 % | N - Dangerous for the environment; R50/53                                                                                                 |
| Cumene hydroperoxide<br>80-15-9                                                                                           | 201-254-7                                  | > 0,1 - < 0,9 %   | T - Toxic; R23<br>Xn - Harmful; R21/22, R48/20/22<br>O - Oxidizing; R7<br>C - Corrosive; R34<br>N - Dangerous for the environment; R51/53 |
| Trichloroethane-1,1,2<br>79-00-5                                                                                          | 201-166-9                                  | > 0,05 - < 0,2 %  | Xn - Harmful; R20/21/22<br>carcinogenic, category 3; R40<br>R66                                                                           |

For full text of the R-Phrases indicated by codes 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:**

Seek medical advice.  
Rinse with running water and soap.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**

Seek medical advice.  
Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

### 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: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Carbon dioxide, foam, powder

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

None known

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

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

### 5.3. Advice for firefighters

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

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation.

### 6.2. Environmental precautions

Do not let product enter drains.

### 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.

Wash spillage site thoroughly with soap and water or detergent solution.

### 6.4. Reference to other sections

See advice in chapter 8

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

#### Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Good industrial hygiene practices should be observed.

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

Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

### 7.3. Specific end use(s)

Acrylic Adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational Exposure Limits

Valid for



| Ingredient                             | ppm | mg/m <sup>3</sup> | Type                              | Category | Remarks  |
|----------------------------------------|-----|-------------------|-----------------------------------|----------|----------|
| METHACRYLIC ACID<br>79-41-4            | 20  | 72                | Time Weighted Average (TWA):      |          | EH40 WEL |
| METHACRYLIC ACID<br>79-41-4            | 40  | 143               | Short Term Exposure Limit (STEL): |          | EH40 WEL |
| 2,6-DI-TERT-BUTYL-P-CRESOL<br>128-37-0 |     | 10                | Time Weighted Average (TWA):      |          | EH40 WEL |

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

| Name on list                                                                                                       | Environmental Compartment    | Exposure period | Value |     |              |               | Remarks |
|--------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------|-------|-----|--------------|---------------|---------|
|                                                                                                                    |                              |                 | mg/l  | ppm | mg/kg        | others        |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | aqua (freshwater)            |                 |       |     |              | 0,006 mg/L    |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | aqua (marine water)          |                 |       |     |              | 0,0006 mg/L   |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | aqua (intermittent releases) |                 |       |     |              | 0,018 mg/L    |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | STP                          |                 |       |     |              | 10 mg/L       |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | sediment (freshwater)        |                 |       |     | 0,996 mg/kg  |               |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | sediment (marine water)      |                 |       |     | 0,0996 mg/kg |               |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | soil                         |                 |       |     | 0,196 mg/kg  |               |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | oral                         |                 |       |     |              | 11 mg/kg food |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | soil                         |                 |       |     | 1,04 mg/kg   |               |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | STP                          |                 |       |     |              | 100 mg/L      |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | sediment (freshwater)        |                 |       |     | 1,29 mg/kg   |               |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | oral                         |                 |       |     | 16,7 mg/kg   |               |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | aqua (marine water)          |                 |       |     |              | 0,4 µg/L      |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | aqua (intermittent releases) |                 |       |     |              | 4 µg/L        |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | aqua (freshwater)            |                 |       |     |              | 4 µg/L        |         |

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

| Name on list                                                                                                       | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value                  | Remarks |
|--------------------------------------------------------------------------------------------------------------------|--------------------|-------------------|----------------------------------------------|---------------|------------------------|---------|
| Methacrylic acid<br>79-41-4                                                                                        | worker             | inhalation        | Long term exposure - local effects           |               | 88 mg/m <sup>3</sup>   |         |
| Methacrylic acid<br>79-41-4                                                                                        | worker             | inhalation        | Long term exposure - systemic effects        |               | 29,6 mg/m <sup>3</sup> |         |
| Methacrylic acid<br>79-41-4                                                                                        | worker             | dermal            | Long term exposure - systemic effects        |               | 4,25 mg/kg bw/day      |         |
| Methacrylic acid<br>79-41-4                                                                                        | general population | inhalation        | Long term exposure - local effects           |               | 6,55 mg/m <sup>3</sup> |         |
| Methacrylic acid<br>79-41-4                                                                                        | general population | inhalation        | Long term exposure - systemic effects        |               | 6,3 mg/m <sup>3</sup>  |         |
| Methacrylic acid<br>79-41-4                                                                                        | general population | dermal            | Long term exposure - systemic effects        |               | 2,55 mg/kg bw/day      |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | worker             | dermal            | Acute/short term exposure - systemic effects |               | 8,3 mg/kg bw/day       |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | worker             | inhalation        | Acute/short term exposure - systemic effects |               | 12,3 mg/m <sup>3</sup> |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | worker             | dermal            | Long term exposure - systemic effects        |               | 8,3 mg/kg bw/day       |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | worker             | inhalation        | Long term exposure - systemic effects        |               | 12,3 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 |               | 3,6 mg/kg bw/day       |         |
| 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 | oral              | Acute/short term exposure - systemic effects |               | 0,75 mg/kg bw/day      |         |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | general population | dermal            | Long term exposure - systemic effects        |               | 3,6 mg/kg bw/day       |         |
| 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> |         |
| 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 bw/day      |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | general population | inhalation        | Long term exposure - systemic effects        |               | 1,74 mg/m <sup>3</sup> |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | worker             | dermal            | Long term exposure - systemic effects        |               | 8,3 mg/kg bw/day       |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | general population | dermal            | Long term exposure - systemic effects        |               | 5 mg/kg bw/day         |         |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0                                                                             | worker             | inhalation        | Long term exposure - systemic effects        |               | 5,8 mg/m <sup>3</sup>  |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

## Respiratory protection:

Ensure adequate ventilation.

Do not inhale vapors and fumes.

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

## 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:

Tightly fitting safety goggles

Avoid eye contact.

## Skin protection:

Wear suitable protective clothing.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                                        |                                        |
|----------------------------------------|----------------------------------------|
| Appearance                             | liquid<br>yellow                       |
| Odor                                   | Acrylic                                |
| Odour threshold                        | No data available / Not applicable     |
| pH                                     | 10                                     |
| ( )                                    |                                        |
| Initial boiling point                  | No data available / Not applicable     |
| Flash point                            | 83 °C (181.4 °F); Tagliabue closed cup |
| Decomposition temperature              | No data available / Not applicable     |
| Vapour pressure                        | < 4 mbar                               |
| Density                                | No data available / Not applicable     |
| Bulk density                           | 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     |
| Solubility (qualitative)               | Slight                                 |
| (Solvent: Water)                       |                                        |
| Solidification temperature             | No data available / Not applicable     |
| Melting point                          | No data available / Not applicable     |
| Flammability                           | No data available / Not applicable     |
| Auto-ignition temperature              | No data available / Not applicable     |
| Explosive limits                       | No data available / Not applicable     |
| Partition coefficient: n-octanol/water | No data available / Not applicable     |
| Evaporation rate                       | No data available / Not applicable     |
| Vapor density                          | 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 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**

None if used properly.

**10.6. Hazardous decomposition products**

carbon oxides.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****General toxicological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**Oral toxicity:**

May cause irritation to the digestive tract.

**Inhalative toxicity:**

Irritating to respiratory system

**Skin irritation:**

Irritating to the skin.

**Eye irritation:**

The product may cause serious eye damage.

**Sensitizing:**

May cause sensitization by skin contact.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No.       | Value<br>type | Value         | Route of<br>application | Exposure<br>time | Species | Method                                   |
|---------------------------------------|---------------|---------------|-------------------------|------------------|---------|------------------------------------------|
| Methacrylic acid<br>79-41-4           | LD50          | 1.320 mg/kg   | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity) |
| 2-Ethylhexyl methacrylate<br>688-84-6 | LD50          | > 2.000 mg/kg | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity) |
| Cumene hydroperoxide<br>80-15-9       | LD50          | 550 mg/kg     | oral                    |                  | rat     |                                          |

**Acute inhalative toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value    | Route of<br>application | Exposure<br>time | Species | Method                                         |
|---------------------------------|---------------|----------|-------------------------|------------------|---------|------------------------------------------------|
| Methacrylic acid<br>79-41-4     | LC50          | 4,7 mg/l | inhalation              | 4 h              | rat     | OECD Guideline 403 (Acute Inhalation Toxicity) |

**Acute dermal toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value                | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|----------------------|-------------------------|------------------|---------|--------|
| Methacrylic acid<br>79-41-4     | LD50          | 500 - 1.000<br>mg/kg | dermal                  |                  | rabbit  |        |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No.                                                                                                 | Result                  | Exposure<br>time | Species | Method                                                      |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------|---------|-------------------------------------------------------------|
| Methacrylic acid<br>79-41-4                                                                                                     | Category 1A (corrosive) | 4 h              | rabbit  | OECD Guideline 404 (Acute<br>Dermal Irritation / Corrosion) |
| Reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight <= 700)<br>25068-38-6 | slightly irritating     | 4 h              | rabbit  | OECD Guideline 404 (Acute<br>Dermal Irritation / Corrosion) |
| Cumene hydroperoxide<br>80-15-9                                                                                                 | corrosive               |                  | rabbit  |                                                             |

**Serious eye damage/irritation:**

| Hazardous components<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<br>Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No.                                                                                                 | Result          | Test type                                       | Species    | Method                                                                |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------|------------|-----------------------------------------------------------------------|
| Methacrylic acid<br>79-41-4                                                                                                     | not sensitising | Buehler<br>test                                 | guinea pig | OECD Guideline 406 (Skin<br>Sensitisation)                            |
| Reaction product:<br>bisphenol-A-<br>(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight <= 700)<br>25068-38-6 | sensitising     | Mouse<br>local<br>lymphnod<br>e assay<br>(LLNA) | mouse      | OECD Guideline 429 (Skin<br>Sensitisation: Local Lymph<br>Node Assay) |

**Germ cell mutagenicity:**

| Hazardous components<br>CAS-No.                                                                                                 | Result   | Type of study /<br>Route of<br>administration          | Metabolic<br>activation /<br>Exposure time | Species | Method                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------|--------------------------------------------|---------|-----------------------------------------------------------------------------------------|
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                           | negative | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                           |         | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)                             |
| 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) |                                            |         | OECD Guideline 472 (Genetic<br>Toxicology: Escherichia coli,<br>Reverse Mutation Assay) |
| Cumene hydroperoxide<br>80-15-9                                                                                                 | positive | bacterial reverse<br>mutation assay (e.g<br>Ames test) | without                                    |         | OECD Guideline 471<br>(Bacterial Reverse Mutation<br>Assay)                             |
| Cumene hydroperoxide<br>80-15-9                                                                                                 | negative | dermal                                                 |                                            | mouse   |                                                                                         |

## SECTION 12: Ecological information

### General ecological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

### 12.1. Toxicity

#### Ecotoxicity:

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

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

| Hazardous components<br>CAS-No.                                                                                              | Value<br>type | Value          | Acute<br>Toxicity<br>Study | Exposure<br>time | Species                                                                    | Method                                                                 |
|------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------------------|------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------|
| Tetrahydrofurfuryl<br>methacrylate<br>2455-24-5                                                                              | LC50          | 34,7 mg/l      | Fish                       | 96 h             | Pimephales promelas                                                        | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| Methacrylic acid<br>79-41-4                                                                                                  | LC50          | 100 - 180 mg/l | Fish                       | 96 h             | Brachydanio rerio (new name:<br>Danio rerio)                               | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| Methacrylic acid<br>79-41-4                                                                                                  | EC50          | > 130 mg/l     | Daphnia                    | 48 h             | Daphnia magna                                                              | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| Methacrylic acid<br>79-41-4                                                                                                  | EC50          | > 8,2 mg/l     | Algae                      |                  |                                                                            | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                        | LC50          | 2,78 mg/l      | Fish                       | 96 h             | Oryzias latipes                                                            | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                        | EC50          | 4,56 mg/l      | Daphnia                    | 48 h             | Daphnia magna                                                              | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                        | EC50          | 3,53 mg/l      | Algae                      | 72 h             | Selenastrum capricornutum<br>(new name: Pseudokirchnerella<br>subcapitata) | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |
| 2-Ethylhexyl methacrylate<br>688-84-6                                                                                        | NOEC          | 0,29 mg/l      | chronic<br>Daphnia         | 21 d             | Daphnia magna                                                              | OECD 211<br>(Daphnia magna,<br>Reproduction Test)                      |
| Reaction product: bisphenol-<br>A-(epichlorhydrin); epoxy<br>resin (number average<br>molecular weight <= 700)<br>25068-38-6 | LC50          | 1,750000 mg/l  | Fish                       | 96 h             | Oncorhynchus mykiss                                                        | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                       | LC0           | >= 0,57 mg/l   | Fish                       | 96 h             | Brachydanio rerio (new name:<br>Danio rerio)                               | EU Method C.1<br>(Acute Toxicity for<br>Fish)                          |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                       | EC50          | 0,48 mg/l      | Daphnia                    | 48 h             | Daphnia magna                                                              | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                       | NOEC          | 0,316 mg/l     | chronic<br>Daphnia         | 21 d             | Daphnia magna                                                              | OECD 211<br>(Daphnia magna,<br>Reproduction Test)                      |
| Cumene hydroperoxide<br>80-15-9                                                                                              | LC50          | 3,9 mg/l       | Fish                       | 96 h             | Oncorhynchus mykiss                                                        | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| Cumene hydroperoxide<br>80-15-9                                                                                              | EC50          | 18 mg/l        | Daphnia                    | 48 h             | Daphnia magna                                                              | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| Cumene hydroperoxide<br>80-15-9                                                                                              | ErC50         | 3,1 mg/l       | Algae                      | 72 h             | Pseudokirchnerella subcapitata                                             | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |

**12.2. Persistence and degradability**

| Hazardous components<br>CAS-No.                 | Result                | Route of<br>application | Degradability | Method                                                                            |
|-------------------------------------------------|-----------------------|-------------------------|---------------|-----------------------------------------------------------------------------------|
| Tetrahydrofurfuryl<br>methacrylate<br>2455-24-5 |                       | aerobic                 | 75 %          | OECD Guideline 301 F (Ready<br>Biodegradability: Manometric<br>Respirometry Test) |
| Methacrylic acid<br>79-41-4                     | readily biodegradable | aerobic                 | 86 %          | OECD Guideline 301 D (Ready<br>Biodegradability: Closed Bottle<br>Test)           |
| 2-Ethylhexyl methacrylate<br>688-84-6           | readily biodegradable |                         | 88 %          | OECD Guideline 301 C (Ready<br>Biodegradability: Modified MITI<br>Test (I))       |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0          |                       | aerobic                 | 4,5 %         | OECD Guideline 301 C (Ready<br>Biodegradability: Modified MITI<br>Test (I))       |
| Cumene hydroperoxide<br>80-15-9                 |                       |                         | 18 %          | OECD Guideline 301 E (Ready<br>biodegradability: Modified OECD<br>Screening Test) |

**12.3. Bioaccumulative potential / 12.4. Mobility in soil****Mobility:**

Cured adhesives are immobile.

| Hazardous components<br>CAS-No.                 | LogKow | Bioconcentration<br>factor (BCF) | Exposure<br>time | Species     | Temperature | Method                                                               |
|-------------------------------------------------|--------|----------------------------------|------------------|-------------|-------------|----------------------------------------------------------------------|
| Tetrahydrofurfuryl<br>methacrylate<br>2455-24-5 | 1,8    |                                  |                  |             |             |                                                                      |
| Methacrylic acid<br>79-41-4                     | 0,93   |                                  |                  |             |             |                                                                      |
| 2-Ethylhexyl methacrylate<br>688-84-6           | 4,24   |                                  |                  |             |             |                                                                      |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0          | 5,1    |                                  |                  |             |             |                                                                      |
| Cumene hydroperoxide<br>80-15-9                 |        | 9,1                              |                  | calculation |             | OECD Guideline 305<br>(Bioconcentration: Flow-<br>through Fish Test) |
| Cumene hydroperoxide<br>80-15-9                 | 2,16   |                                  |                  |             |             |                                                                      |

**12.5. Results of PBT and vPvB assessment**

| Hazardous components<br>CAS-No.                                                                                          | PBT/vPvB                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Methacrylic acid<br>79-41-4                                                                                              | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very<br>Bioaccumulative (vPvB) criteria. |
| Reaction product: bisphenol-A-(epichlorhydrin);<br>epoxy resin (number average molecular weight<br><= 700)<br>25068-38-6 | Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria                                                           |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0                                                                                   | Not fulfilling PBT (persistent/bioaccumulative/toxic) 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.

Disposal of uncleaned packages:

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

Waste code

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

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

## SECTION 14: Transport information

**14.1. UN number**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.2. UN proper shipping name**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.3. Transport hazard class(es)**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.4. Packaging group**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.5. Environmental hazards**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.6. Special precautions for user**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 < 9 %  
(1999/13/EC)

**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:

- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- R21/22 Harmful in contact with skin and if swallowed.
- R23 Toxic by inhalation.
- R34 Causes burns.
- R35 Causes severe burns.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R36/38 Irritating to eyes and skin.
- R40 Limited evidence of a carcinogenic effect.
- R43 May cause sensitisation by skin contact.
- R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R66 Repeated exposure may cause skin dryness or cracking.
- R7 May cause fire.
- H242 Heating may cause a fire.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- 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.

### Further information:

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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.