



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

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SDS No. : 173048  
V007.0

LOCTITE 511

Revision: 04.01.2016  
printing date: 05.04.2016  
Replaces version from: 29.07.2015

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

#### 1.1. Product identifier

LOCTITE 511

#### Contains:

Cumene hydroperoxide  
Maleic acid  
Acetic acid, 2-phenylhydrazide  
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

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

Intended use:  
Adhesive

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

Henkel Ltd  
Wood Lane End  
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000  
Fax-no.: +44 1442 278071

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 (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              |            |
| Chronic hazards to the aquatic environment              | Category 3 |
| H412 Harmful to aquatic life with long lasting effects. |            |

## 2.2. Label elements

### Label elements (CLP):

|  |  |  |
|--|--|--|
| <b>Hazard pictogram:</b>                       |   |  |
| <b>Signal word:</b>                            | Warning  |  |
| <b>Hazard statement:</b>                       | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.<br>H412 Harmful to aquatic life with long lasting effects.          |  |
| <b>Precautionary statement:</b>                | ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements*** |  |
| <b>Precautionary statement:<br/>Prevention</b> | P261 Avoid breathing vapours.<br>P273 Avoid release to the environment.<br>P280 Wear protective gloves.  |  |
| <b>Precautionary statement:<br/>Response</b>   | P302+P352 IF ON SKIN: Wash with plenty of water.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.                          |  |

## 2.3. Other hazards

None if used properly.

# SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

### General chemical description:

Anaerobic Sealant

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

| Hazardous components<br>CAS-No.                                      | EC Number<br>REACH-Reg No.    | content       | Classification   |
|--|-------------------------------|---------------|--|
| 2-Ethylhexyl methacrylate<br>688-84-6                                | 211-708-6                     | 5- < 10 %     | STOT SE 3<br>H335<br>Skin Irrit. 2<br>H315<br>Eye Irrit. 2<br>H319   |
| Decan-1-ol<br>112-30-1   | 203-956-9<br>01-2119480407-35 | 5- < 10 %     | Eye Irrit. 2<br>H319<br>Aquatic Chronic 2<br>H411  |
| Cumene hydroperoxide<br>80-15-9                                      | 201-254-7                     | 1- < 3 %      | Acute Tox. 4; Dermal<br>H312<br>STOT RE 2<br>H373<br>Acute Tox. 4; Oral<br>H302<br>Org. Perox. E<br>H242<br>Acute Tox. 3; Inhalation<br>H331<br>Aquatic Chronic 2<br>H411<br>Skin Corr. 1B<br>H314   |
| Maleic acid<br>110-16-7  | 203-742-5<br>01-2119488705-25 | 0,1- < 1 %    | Acute Tox. 4; Oral<br>H302<br>Acute Tox. 4; Dermal<br>H312<br>Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Eye Irrit. 2<br>H319<br>STOT SE 3<br>H335   |
| N,N'-Ethane-1,2-diylbis(12-<br>hydroxyoctadecan-1-amide)<br>123-26-2 | 204-613-6<br>01-2119978265-26 | 0,1- < 1 %    | Skin Sens. 1B<br>H317<br>Aquatic Chronic 4<br>H413   |
| Acetic acid, 2-phenylhydrazide<br>114-83-0                           | 204-055-3                     | 0,1- < 1 %    | Acute Tox. 3; Oral<br>H301<br>Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Eye Irrit. 2<br>H319<br>STOT SE 3; Inhalation<br>H335<br>Carc. 2<br>H351  |
| 1,4-Naphthalenedione<br>130-15-4                                     | 204-977-6                     | 0,01- < 0,1 % | Acute Tox. 3; Oral<br>H301<br>Skin Irrit. 2; Dermal<br>H315<br>Skin Sens. 1; Dermal<br>H317<br>Eye Irrit. 2<br>H319<br>Acute Tox. 1; Inhalation<br>H330<br>STOT SE 3; Inhalation<br>H335<br>Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410<br>M factor: 10 |

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

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

Inhalation:

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

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Eye contact:

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

Ingestion:

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

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

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

### **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**

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

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

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

**Additional information:**

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

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

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

Avoid skin and eye contact.

Ensure adequate ventilation.

### **6.2. Environmental precautions**

Do not let product enter drains.

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

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

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

Dispose of contaminated material as waste according to Section 13.

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

See advice in section 8

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

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

Use only in well-ventilated areas.

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

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

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.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

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

Adhesive

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**Valid for  
Great Britain

| <b>Ingredient [Regulated substance]</b>                                | <b>ppm</b> | <b>mg/m<sup>3</sup></b> | <b>Value type</b>                 | <b>Short term exposure limit category / Remarks</b> | <b>Regulatory list</b> |
|--|------------|-------------------------|-----------------------------------|---|------------------------|
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, INHALABLE DUST]  |            | 6                       | Time Weighted Average (TWA):      |   | EH40 WEL               |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, RESPIRABLE DUST] |            | 2,4                     | Time Weighted Average (TWA):      |   | EH40 WEL               |
| Cumene<br>98-82-8<br>[CUMENE]  | 50         | 250                     | Short Term Exposure Limit (STEL): |   | EH40 WEL               |
| Cumene<br>98-82-8<br>[CUMENE]  |            |                         | Skin designation:                 | Can be absorbed through the skin.                   | EH40 WEL               |
| Cumene<br>98-82-8<br>[CUMENE]  | 25         | 125                     | Time Weighted Average (TWA):      |   | EH40 WEL               |
| Cumene<br>98-82-8<br>[CUMENE]  | 50         | 250                     | Short Term Exposure Limit (STEL): | Indicative  | ECTLV                  |
| Cumene<br>98-82-8<br>[CUMENE]  | 20         | 100                     | Time Weighted Average (TWA):      | Indicative  | ECTLV                  |

**Occupational Exposure Limits**Valid for  
Ireland

| <b>Ingredient [Regulated substance]</b>                                     | <b>ppm</b> | <b>mg/m<sup>3</sup></b> | <b>Value type</b>                 | <b>Short term exposure limit category / Remarks</b> | <b>Regulatory list</b> |
|---|------------|-------------------------|-----------------------------------|---|------------------------|
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, TOTAL INHALABLE DUST] |            | 6                       | Time Weighted Average (TWA):      |   | IR_OEL                 |
| Silicon dioxide<br>112945-52-5<br>[SILICA, AMORPHOUS, RESPIRABLE DUST]      |            | 2,4                     | Time Weighted Average (TWA):      |   | IR_OEL                 |
| Cumene<br>98-82-8<br>[ISOPROPYL BENZENE]                                    | 20         | 100                     | Time Weighted Average (TWA):      | Indicative OELV                                     | IR_OEL                 |
| Cumene<br>98-82-8<br>[ISOPROPYL BENZENE]                                    | 50         | 250                     | Short Term Exposure Limit (STEL): | Indicative OELV                                     | IR_OEL                 |
| Cumene<br>98-82-8<br>[ISOPROPYL BENZENE]                                    |            |                         | Skin designation:                 | Can be absorbed through the skin.                   | IR_OEL                 |
| Cumene<br>98-82-8<br>[CUMENE]   | 50         | 250                     | Short Term Exposure Limit (STEL): | Indicative  | ECTLV                  |
| Cumene<br>98-82-8<br>[CUMENE]   | 20         | 100                     | Time Weighted Average (TWA):      | Indicative  | ECTLV                  |

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

| Name on list            | Environmental Compartment          | Exposure period | Value |     |                 |             | Remarks |
|-------------------------|------------------------------------|-----------------|-------|-----|-----------------|-------------|---------|
|                         |                                    |                 | mg/l  | ppm | mg/kg           | others      |         |
| Decan-1-ol<br>112-30-1  | aqua<br>(freshwater)               |                 |       |     |                 | 0,022 mg/L  |         |
| Decan-1-ol<br>112-30-1  | sediment<br>(freshwater)           |                 |       |     | 0,13 mg/kg      |             |         |
| Decan-1-ol<br>112-30-1  | aqua (marine<br>water)             |                 |       |     |                 | 0,0022 mg/L |         |
| Decan-1-ol<br>112-30-1  | sediment<br>(marine water)         |                 |       |     | 0,013<br>mg/kg  |             |         |
| Decan-1-ol<br>112-30-1  | soil                               |                 |       |     | 0,13 mg/kg      |             |         |
| Decan-1-ol<br>112-30-1  | sewage<br>treatment plant<br>(STP) |                 |       |     |                 | 0,4 mg/L    |         |
| Maleic acid<br>110-16-7 | aqua<br>(freshwater)               |                 |       |     |                 | 0,1 mg/L    |         |
| Maleic acid<br>110-16-7 | aqua<br>(intermittent<br>releases) |                 |       |     |                 | 0,4281 mg/L |         |
| Maleic acid<br>110-16-7 | sediment<br>(freshwater)           |                 |       |     | 0,334<br>mg/kg  |             |         |
| Maleic acid<br>110-16-7 | sewage<br>treatment plant<br>(STP) |                 |       |     |                 | 44,6 mg/L   |         |
| Maleic acid<br>110-16-7 | aqua (marine<br>water)             |                 |       |     |                 | 0,01 mg/L   |         |
| Maleic acid<br>110-16-7 | sediment<br>(marine water)         |                 |       |     | 0,0334<br>mg/kg |             |         |
| Maleic acid<br>110-16-7 | soil                               |                 |       |     | 0,0415<br>mg/kg |             |         |

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

| Name on list            | Application Area | Route of Exposure | Health Effect                                | Exposure Time | Value            | Remarks |
|-------------------------|------------------|-------------------|--|---------------|------------------|---------|
| Maleic acid<br>110-16-7 | Workers          | dermal            | Acute/short term exposure - local effects    |               | 0,55 mg/cm2      |         |
| Maleic acid<br>110-16-7 | Workers          | dermal            | Long term exposure - local effects           |               | 0,04 mg/cm2      |         |
| Maleic acid<br>110-16-7 | Workers          | dermal            | Acute/short term exposure - systemic effects |               | 58 mg/kg bw/day  |         |
| Maleic acid<br>110-16-7 | Workers          | dermal            | Long term exposure - systemic effects        |               | 3,3 mg/kg bw/day |         |
| Maleic acid<br>110-16-7 | Workers          | inhalation        | Acute/short term exposure - local effects    |               | 3 mg/m3          |         |
| Maleic acid<br>110-16-7 | Workers          | inhalation        | Long term exposure - systemic effects        |               | 3 mg/m3          |         |
| Maleic acid<br>110-16-7 | Workers          | inhalation        | Long term exposure - local effects           |               | 3 mg/m3          |         |
| Maleic acid<br>110-16-7 | Workers          | inhalation        | Acute/short term exposure - systemic effects |               | 3 mg/m3          |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

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

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to &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:

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

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

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

Advices to personal protection equipment:

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

Personal protective equipment should conform to the relevant EN standard.

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

|                                    |                                    |
|------------------------------------|------------------------------------|
| Appearance                         | paste<br>white                     |
| Odor                               | alcohol-like                       |
| Odour threshold                    | No data available / Not applicable |
| pH                                 | Not applicable                     |
| Initial boiling point              | Not determined                     |
| Flash point                        | > 100 °C (> 212 °F)                |
| Decomposition temperature          | No data available / Not applicable |
| Vapour pressure<br>(20 °C (68 °F)) | < 3 mm hg                          |
| Density<br>( $\rho$ )              | 1,05 g/cm <sup>3</sup>             |
| 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)           | Not miscible                       |



|  |                                    |
|--|------------------------------------|
| (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                          | Not available.                     |
| Oxidising properties                   | No data available / Not applicable |

**9.2. Other information**

No data available / Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reaction with strong acids.  
Reacts with strong oxidants.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity

**10.4. Conditions to avoid**

No decomposition if used according to specifications.

**10.5. Incompatible materials**

See section reactivity

**10.6. Hazardous decomposition products**

Irritating organic vapours.  
Oxides of carbon.  
Sulphur oxides  
nitrogen oxides

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

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**STOT-single exposure:**

May cause respiratory irritation.

**Oral toxicity:**

This material is considered to have low toxicity if swallowed.

**Skin irritation:**

Causes skin irritation.

**Eye irritation:**

Causes serious eye irritation.

**Sensitizing:**

May cause an allergic skin reaction.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No.  | Value<br>type | Value         | Route of<br>application | Exposure<br>time | Species | Method  |
|--|---------------|---------------|-------------------------|------------------|---------|---|
| 2-Ethylhexyl methacrylate<br>688-84-6  | LD50          | > 2.000 mg/kg | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity)<br>Henkel Method |
| Decan-1-ol<br>112-30-1   | LD50          | > 5.000 mg/kg | oral                    |                  | rat     |   |
| Cumene hydroperoxide<br>80-15-9  | LD50          | 550 mg/kg     | oral                    |                  | rat     |   |
| Maleic acid<br>110-16-7  | LD50          | 708 mg/kg     | oral                    |                  | rat     |   |
| N,N'-Ethane-1,2-<br>diylbis(12-<br>hydroxyoctadecan-1-<br>amide)<br>123-26-2 | LD50          | > 2.000 mg/kg | oral                    |                  |         |   |

**Acute inhalative toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type                                  | Value    | Route of<br>application | Exposure<br>time | Species | Method           |
|---------------------------------|--|----------|-------------------------|------------------|---------|------------------|
| Decan-1-ol<br>112-30-1          | Acute<br>toxicity<br>estimate<br>(ATE)<br>LC50 | 5,1 mg/l | aerosol                 |                  |         | Expert judgement |
| Decan-1-ol<br>112-30-1          |  | 4 mg/l   |                         | 2 h              | mouse   |                  |

**Acute dermal toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value       | Route of<br>application | Exposure<br>time | Species | Method |
|---------------------------------|---------------|-------------|-------------------------|------------------|---------|--------|
| Maleic acid<br>110-16-7         | LD50          | 1.560 mg/kg | dermal                  |                  | rabbit  |        |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No. | Result                |  | Exposure<br>time | Species | Method   |
|---------------------------------|-----------------------|--|------------------|---------|--|
| Decan-1-ol<br>112-30-1          | slightly irritating   |  | 4 h              | human   | Patch Test   |
| Decan-1-ol<br>112-30-1          | moderately irritating |  | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Cumene hydroperoxide<br>80-15-9 | corrosive             |  |                  | rabbit  | Draize Test  |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No. | Result            |  | Exposure<br>time | Species | Method      |
|---------------------------------|-------------------|--|------------------|---------|-------------|
| Decan-1-ol<br>112-30-1          | highly irritating |  |                  | rabbit  | Draize Test |

**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) |
| Decan-1-ol<br>112-30-1                | negative | bacterial reverse<br>mutation assay (e.g<br>Ames test) | with and without                           |         | Henkel Method   |
| 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   |   |

**Repeated dose toxicity**

| Hazardous components<br>CAS-No. | Result | Route of<br>application | Exposure time /<br>Frequency of<br>treatment | Species | Method |
|---------------------------------|--------|-------------------------|--|---------|--------|
| Cumene hydroperoxide<br>80-15-9 |        | inhalation:<br>aerosol  | 6 h/d5 d/w                                   | rat     |        |

**SECTION 12: Ecological information****General ecological information:**

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. 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 life with long lasting effects.

| Hazardous components<br>CAS-No.                                      | Value<br>type | Value          | Acute<br>Toxicity<br>Study | Exposure<br>time | Species  | Method   |
|--|---------------|----------------|----------------------------|------------------|--|--|
| 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)                      |
| Decan-1-ol<br>112-30-1   | LC50          | 2,2 - 2,5 mg/l | Fish                       | 96 h             | Pimephales promelas  | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| Decan-1-ol<br>112-30-1   | EC50          | 2,9 mg/l       | Daphnia                    | 48 h             | Daphnia magna  |  |
| Decan-1-ol<br>112-30-1   | EC50          | 4,4 mg/l       | Algae                      | 5 d              | Chlorella vulgaris   | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |
| Decan-1-ol<br>112-30-1   | EC0           | 10.000 mg/l    | Bacteria                   | 30 min           |  |  |
| 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)                |
| Cumene hydroperoxide<br>80-15-9                                      | EC10          | 70 mg/l        | Bacteria                   | 30 min           |  |  |
| Maleic acid<br>110-16-7  | LC50          | > 245 mg/l     | Fish                       | 48 h             | Leuciscus idus   | DIN 38412-15   |
| Maleic acid<br>110-16-7  | EC50          | 42,81 mg/l     | Daphnia                    | 48 h             | Daphnia magna  | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| N,N'-Ethane-1,2-diylbis(12-<br>hydroxyoctadecan-1-amide)<br>123-26-2 | LL50          | > 10 mg/l      | Fish                       | 96 h             | Oncorhynchus mykiss  | OECD Guideline<br>203 (Fish, Acute<br>Toxicity Test)                   |
| N,N'-Ethane-1,2-diylbis(12-<br>hydroxyoctadecan-1-amide)<br>123-26-2 | EL50          | > 10 mg/l      | Daphnia                    | 48 h             | Daphnia magna  | OECD Guideline<br>202 (Daphnia sp.<br>Acute<br>Immobilisation<br>Test) |
| N,N'-Ethane-1,2-diylbis(12-<br>hydroxyoctadecan-1-amide)<br>123-26-2 | EC50          | > 100 mg/l     | Algae                      | 72 h             | Pseudokirchnerella subcapitata   | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |
| N,N'-Ethane-1,2-diylbis(12-<br>hydroxyoctadecan-1-amide)<br>123-26-2 | NOEC          | 100 mg/l       | Algae                      | 72 h             | Pseudokirchnerella subcapitata   | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |
| 1,4-Naphthalenedione<br>130-15-4                                     | EC50          | 0,011 mg/l     | Algae                      | 72 h             | Dunaliella bioculata   | OECD Guideline<br>201 (Alga, Growth<br>Inhibition Test)                |

## 12.2. Persistence and degradability

### Persistence and Biodegradability:

No data available.

| Hazardous components<br>CAS-No. | Result | Route of<br>application | Degradability | Method |
|---------------------------------|--------|-------------------------|---------------|--------|
|---------------------------------|--------|-------------------------|---------------|--------|

|  |                            |         |          |   |
|--|----------------------------|---------|----------|---|
| 2-Ethylhexyl methacrylate<br>688-84-6                            | readily biodegradable      |         | 88 %     | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)) |
| Decan-1-ol<br>112-30-1   | readily biodegradable      | aerobic | 86 %     | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)     |
| Cumene hydroperoxide<br>80-15-9                                  |                            | no data | 0 %      | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)     |
| Maleic acid<br>110-16-7  | readily biodegradable      | aerobic | 97,08 %  | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)     |
| N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)<br>123-26-2 | Not readily biodegradable. | aerobic | 22 %     | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)     |
| 1,4-Naphthalenedione<br>130-15-4                                 |                            | no data | 0 - 60 % | OECD 301 A - F  |

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

Cured adhesives are immobile.

**Bioaccumulative potential:**

No data available.

| Hazardous components<br>CAS-No.                                  | LogKow | Bioconcentration<br>factor (BCF) | Exposure<br>time | Species     | Temperature | Method  |
|--|--------|----------------------------------|------------------|-------------|-------------|---|
| 2-Ethylhexyl methacrylate<br>688-84-6                            | 4,24   |                                  |                  |             |             |   |
| Decan-1-ol<br>112-30-1   | 4,57   |                                  |                  |             |             |   |
| Cumene hydroperoxide<br>80-15-9                                  |        | 9,1                              |                  | calculation |             | OECD Guideline 305<br>(Bioconcentration: Flow-through Fish Test)                      |
| Cumene hydroperoxide<br>80-15-9                                  | 2,16   |                                  |                  |             |             |   |
| Maleic acid<br>110-16-7  | -1,3   |                                  |                  |             | 20 °C       | OECD Guideline 107<br>(Partition Coefficient (n-octanol / water), Shake Flask Method) |
| N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)<br>123-26-2 | 5,86   |                                  |                  |             |             | OECD Guideline 117<br>(Partition Coefficient (n-octanol / water), HPLC Method)        |
| Acetic acid, 2-phenylhydrazide<br>114-83-0                       | 0,74   |                                  |                  |             |             |   |
| 1,4-Naphthalenedione<br>130-15-4                                 | 1,71   |                                  |                  |             |             |   |

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

| Hazardous components<br>CAS-No. | PBT/vPvB  |
|---------------------------------|---|
| Maleic acid<br>110-16-7         | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Product disposal:**

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

**Disposal of uncleaned packages:**

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

**Waste code**

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

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

**SECTION 14: Transport information****14.1. UN number**

|      |                     |
|------|---------------------|
| ADR  | Not dangerous goods |
| RID  | Not dangerous goods |
| ADN  | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

**14.2. UN proper shipping name**

|      |                     |
|------|---------------------|
| ADR  | Not dangerous goods |
| RID  | Not dangerous goods |
| ADN  | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

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

|      |                     |
|------|---------------------|
| ADR  | Not dangerous goods |
| RID  | Not dangerous goods |
| ADN  | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

**14.4. Packing group**

|      |                     |
|------|---------------------|
| ADR  | Not dangerous goods |
| RID  | Not dangerous goods |
| ADN  | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

**14.5. Environmental hazards**

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

**14.6. Special precautions for user**

|     |                |
|-----|----------------|
| ADR | not applicable |
|-----|----------------|

|      |                |
|------|----------------|
| RID  | not applicable |
| ADN  | not applicable |
| IMDG | not applicable |
| IATA | not applicable |

**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 < 5 %  
(2010/75/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:

H242 Heating may cause a fire.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
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.  
H330 Fatal if inhaled.  
H331 Toxic 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.  
H413 May cause long lasting harmful effects to aquatic life.

### 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.

### Label elements (DPD):

Xi - Irritant



### Risk phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R43 May cause sensitisation by skin contact.

### Safety phrases:

S23 Do not breathe vapour.  
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.  
S37 Wear suitable gloves.  
S51 Use only in well-ventilated areas.  
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

### Additional labeling:

For consumer use only: S2 Keep out of the reach of children.  
S46 If swallowed, seek medical advice immediately and show this container or label.

### Contains:

Maleic acid

**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.**



