



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

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LOCTITE 460

SDS No. : 434271  
V004.0

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Replaces version from: 24.04.2017

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

#### 1.1. Product identifier

LOCTITE 460

#### 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@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):

Chronic hazards to the aquatic environment

H412 Harmful to aquatic life with long lasting effects.

Category 3

#### 2.2. Label elements

##### Label elements (CLP):

##### Hazard statement:

H412 Harmful to aquatic life with long lasting effects.

**Supplemental information** EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

**Precautionary statement: Prevention** P273 Avoid release to the environment.

**Precautionary statement: Disposal** P501 Dispose of waste and residues in accordance with local authority requirements.

### 2.3. Other hazards

None if used properly.

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General chemical description:

Cyanoacrylate Adhesive

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

| Hazardous components<br>CAS-No.                               | EC Number<br>REACH-Reg No.    | content       | Classification   |
|---|-------------------------------|---------------|--|
| Bismaleimide<br>105391-33-1                                   | 424-600-0<br>01-0000017105-79 | 0,25- 2,5 %   | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410   |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | 204-327-1<br>01-2119496065-33 | 0,1- < 1 %    | Repr. 2<br>H361  |
| Hydroquinone<br>123-31-9                                      | 204-617-8<br>01-2119524016-51 | 0,01- < 0,1 % | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410<br>Carc. 2<br>H351<br>Muta. 2<br>H341<br>Acute Tox. 4; Oral<br>H302<br>Eye Dam. 1<br>H318<br>Skin Sens. 1<br>H317<br>M factor (Acute Aquat Tox): 10 |

For full text of the H - statements and other abbreviations see section 16 "Other information".

Substances without classification may have community workplace exposure limits available.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

**Skin contact:**

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water.

Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn.

Burns should be treated normally after the adhesive has been removed from the skin.

If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth.

Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

**Eye contact:**

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad.

Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive.

Keep eye covered until debonding is complete, usually within 1-3 days.

Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

**Ingestion:**

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

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

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

**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:**

Foam, extinguishing powder, carbon dioxide.

Fine water spray

**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) and carbon dioxide (CO<sub>2</sub>) can be released.

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

**5.3. Advice for firefighters**

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

**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**

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Wear protective equipment.

**6.2. Environmental precautions**

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

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

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

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**

Ventilation (low level) is recommended when using large volumes  
 Use of dispensing equipment is recommended to minimise the risk of skin or eye contact  
 Avoid skin and eye contact.  
 See advice in section 8

## Hygiene measures:

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

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

Refer to Technical Data Sheet

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

Adhesive

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

Valid for  
 Great Britain

| Ingredient [Regulated substance]           | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|--|-----|-------------------|------------------------------|--|-----------------|
| Hydroquinone<br>123-31-9<br>[HYDROQUINONE] |     | 0,5               | Time Weighted Average (TWA): |  | EH40 WEL        |

**Occupational Exposure Limits**

Valid for  
 Ireland

| Ingredient [Regulated substance]           | ppm | mg/m <sup>3</sup> | Value type                   | Short term exposure limit category / Remarks | Regulatory list |
|--|-----|-------------------|------------------------------|--|-----------------|
| Hydroquinone<br>123-31-9<br>[HYDROQUINONE] |     | 0,5               | Time Weighted Average (TWA): |  | IR_OEL          |

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

| Name on list  | Environmental Compartment    | Exposure period | Value         |     |               |        | Remarks |
|---|------------------------------|-----------------|---------------|-----|---------------|--------|---------|
|   |                              |                 | mg/l          | ppm | mg/kg         | others |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | aqua (freshwater)            |                 | 0,0068 mg/l   |     |               |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | aqua (marine water)          |                 | 0,00068 mg/l  |     |               |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | aqua (intermittent releases) |                 | 0,048 mg/l    |     |               |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | sewage treatment plant (STP) |                 | 100 mg/l      |     |               |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | sediment (freshwater)        |                 |               |     | 102 mg/kg     |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | sediment (marine water)      |                 |               |     | 10,2 mg/kg    |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | Soil                         |                 |               |     | 20,4 mg/kg    |        |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1 | oral                         |                 |               |     | 10 mg/kg      |        |         |
| Hydroquinone 123-31-9                                 | aqua (freshwater)            |                 | 0,00057 mg/l  |     |               |        |         |
| Hydroquinone 123-31-9                                 | aqua (marine water)          |                 | 0,000057 mg/l |     |               |        |         |
| Hydroquinone 123-31-9                                 | sediment (freshwater)        |                 |               |     | 0,0049 mg/kg  |        |         |
| Hydroquinone 123-31-9                                 | sediment (marine water)      |                 |               |     | 0,00049 mg/kg |        |         |
| Hydroquinone 123-31-9                                 | aqua (intermittent releases) |                 | 0,00134 mg/l  |     |               |        |         |
| Hydroquinone 123-31-9                                 | Soil                         |                 |               |     | 0,00064 mg/kg |        |         |
| Hydroquinone 123-31-9                                 | sewage treatment plant (STP) |                 | 0,71 mg/l     |     |               |        |         |

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

| Name on list   | Application Area   | Route of Exposure | Health Effect                                | Exposure Time | Value                  | Remarks |
|--|--------------------|-------------------|--|---------------|------------------------|---------|
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | Workers            | dermal            | Acute/short term exposure - systemic effects |               | 3,175 mg/kg            |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | Workers            | Inhalation        | Acute/short term exposure - systemic effects |               | 22,4 mg/m <sup>3</sup> |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | Workers            | dermal            | Long term exposure - systemic effects        |               | 0,635 mg/kg            |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 4,48 mg/m <sup>3</sup> |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | dermal            | Acute/short term exposure - systemic effects |               | 1,59 mg/kg             |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | Inhalation        | Acute/short term exposure - systemic effects |               | 5,5 mg/m <sup>3</sup>  |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | oral              | Acute/short term exposure - systemic effects |               | 1,59 mg/kg             |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | dermal            | Long term exposure - systemic effects        |               | 0,318 mg/kg            |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | Inhalation        | Long term exposure - systemic effects        |               | 1,1 mg/m <sup>3</sup>  |         |
| 6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol<br>119-47-1 | General population | oral              | Long term exposure - systemic effects        |               | 0,318 mg/kg            |         |
| Hydroquinone<br>123-31-9                                 | Workers            | dermal            | Long term exposure - systemic effects        |               | 3,33 mg/kg             |         |
| Hydroquinone<br>123-31-9                                 | Workers            | inhalation        | Long term exposure - systemic effects        |               | 2,1 mg/m <sup>3</sup>  |         |
| Hydroquinone<br>123-31-9                                 | General population | dermal            | Long term exposure - systemic effects        |               | 1,66 mg/kg             |         |
| Hydroquinone<br>123-31-9                                 | General population | inhalation        | Long term exposure - systemic effects        |               | 1,05 mg/m <sup>3</sup> |         |
| Hydroquinone<br>123-31-9                                 | General population | oral              | Long term exposure - systemic effects        |               | 0,6 mg/kg              |         |

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

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

Filter type: A (EN 14387)

**Hand protection:**

Polyethylene or polypropylene gloves are recommended when using large volumes.

Do not use PVC, rubber or nylon gloves.

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

**Eye protection:**

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

Protective eye equipment should conform to EN166.

**Skin protection:**

Wear suitable protective clothing.

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

**Advices to personal protection equipment:**

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

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

|  |                                      |
|--|--------------------------------------|
| Appearance                             | Liquid<br>Clear, Colorless,<br>Straw |
| Odour threshold                        | No data available / Not applicable   |
| pH                                     | No data available / Not applicable   |
| Melting point                          | No data available / Not applicable   |
| Solidification temperature             | No data available / Not applicable   |
| Initial boiling point                  | No data available / Not applicable   |
| Flash point                            | 80 °C (176 °F)                       |
| Evaporation rate                       | No data available / Not applicable   |
| Flammability                           | No data available / Not applicable   |
| Explosive limits                       | No data available / Not applicable   |
| Vapour pressure<br>(50 °C (122 °F))    | < 700 mbar                           |
| Relative vapour density:               | No data available / Not applicable   |
| Density<br>(20 °C (68 °F))             | 1,1 g/cm <sup>3</sup>                |
| Bulk density                           | No data available / Not applicable   |
| Solubility                             | No data available / Not applicable   |
| Solubility (qualitative)               | Polymerises in presence of water.    |
| Partition coefficient: n-octanol/water | No data available / Not applicable   |
| Auto-ignition temperature              | No data available / Not applicable   |
| Decomposition temperature              | No data available / Not applicable   |
| Viscosity                              | No data available / Not applicable   |
| Viscosity (kinematic)                  | No data available / Not applicable   |
| Explosive properties                   | No data available / Not applicable   |
| Oxidising properties                   | No data available / Not applicable   |

**9.2. Other information**

No data available / Not applicable

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

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity

**10.4. Conditions to avoid**

Stable under normal conditions of storage and use.

**10.5. Incompatible materials**

See section reactivity.

**10.6. Hazardous decomposition products**

carbon oxides.

**SECTION 11: Toxicological information****General toxicological information:**

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth.

Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals

In dry atmosphere with < 50% humidity, vapours may irritate the eyes and respiratory system

**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 CAS-No.                                  | Value type | Value          | Species | Method                                   |
|---|------------|----------------|---------|--|
| Bismaleimide<br>105391-33-1                                   | LD50       | > 5.000 mg/kg  | rat     | OECD Guideline 401 (Acute Oral Toxicity) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | LD50       | > 10.000 mg/kg | rat     | not specified                            |
| Hydroquinone<br>123-31-9                                      | LD50       | 367 mg/kg      | rat     | OECD Guideline 401 (Acute Oral Toxicity) |

**Acute dermal toxicity:**

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

| Hazardous substances CAS-No.                                  | Value type | Value          | Species | Method                                     |
|---|------------|----------------|---------|--|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | LD50       | > 10.000 mg/kg | rat     | not specified                              |
| Hydroquinone<br>123-31-9                                      | LD50       | > 2.000 mg/kg  | rabbit  | OECD Guideline 402 (Acute Dermal Toxicity) |



**Acute inhalative toxicity:**

No data available.

**Skin corrosion/irritation:**

Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 (rabbit)>2000mg/kg  
Due to polymerisation at the skin surface allergic reaction is unlikely to occur

| Hazardous substances<br>CAS-No. | Result         | Exposure<br>time | Species | Method   |
|---------------------------------|----------------|------------------|---------|--|
| Bismaleimide<br>105391-33-1     | not irritating | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Hydroquinone<br>123-31-9        | not irritating | 24 h             | rabbit  | Weight of evidence                                       |

**Serious eye damage/irritation:**

Liquid product will bond eyelids. In a dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect

| Hazardous substances<br>CAS-No. | Result         | Exposure<br>time | Species | Method  |
|---------------------------------|----------------|------------------|---------|---|
| Bismaleimide<br>105391-33-1     | not irritating | 24 h             | 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   |
|---------------------------------|-----------------|---------------------------------------|------------|--|
| Bismaleimide<br>105391-33-1     | not sensitising | Guinea pig maximisation<br>test       | guinea pig | OECD Guideline 406 (Skin Sensitisation)  |
| Hydroquinone<br>123-31-9        | sensitising     | Guinea pig maximisation<br>test       | guinea pig | equivalent or similar to OECD Guideline<br>406 (Skin Sensitisation)                            |
| Hydroquinone<br>123-31-9        | sensitising     | Mouse local lymphnode<br>assay (LLNA) | mouse      | equivalent or similar to OECD Guideline<br>429 (Skin Sensitisation: Local Lymph<br>Node Assay) |

**Germ cell mutagenicity:**

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

| Hazardous substances CAS-No.                               | Result   | Type of study / Route of administration          | Metabolic activation / Exposure time | Species | Method  |
|--|----------|--|--------------------------------------|---------|---|
| Bismaleimide 105391-33-1                                   | negative | bacterial gene mutation assay                    | with and without                     |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)   |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                     |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)   |
| Hydroquinone 123-31-9                                      | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                     |         | equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)                    |
| Hydroquinone 123-31-9                                      | negative | in vitro mammalian chromosome aberration test    | with and without                     |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)                                |
| Hydroquinone 123-31-9                                      | positive | mammalian cell gene mutation assay               | with and without                     |         | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)                                   |
| Hydroquinone 123-31-9                                      | positive | intraperitoneal                                  |                                      | mouse   | equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)             |
| Hydroquinone 123-31-9                                      | negative | oral: gavage                                     |                                      | rat     | equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)     |
| Hydroquinone 123-31-9                                      | positive | intraperitoneal                                  |                                      | mouse   | equivalent or similar to OECD Guideline 483 (Mammalian Spermatogonial Chromosome Aberration Test) |

**Carcinogenicity**

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

| Hazardous components CAS-No. | Result       | Route of application | Exposure time / Frequency of treatment | Species | Sex         | Method   |
|------------------------------|--------------|----------------------|--|---------|-------------|--|
| Hydroquinone 123-31-9        | carcinogenic | oral: gavage         | 103 w<br>5 d/w                         | rat     | male/female | equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Hydroquinone 123-31-9        | carcinogenic | oral: gavage         | 103 w<br>5 d/w                         | mouse   | female      | equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

**Reproductive toxicity:**

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

| Hazardous substances CAS-No.                               | Result / Value   | Test type            | Route of application | Species | Method  |
|--|--|----------------------|----------------------|---------|---|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | NOAEL P 12,5 mg/kg   | screening            | oral: gavage         | rat     | OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test) |
| Hydroquinone 123-31-9                                      | NOAEL P 15 mg/kg<br>NOAEL F1 150 mg/kg<br>NOAEL F2 150 mg/kg | Two generation study | oral: gavage         | rat     | EPA OTS 798.4700 (Reproduction and Fertility Effects)                     |

**STOT-single exposure:**

No data available.

**STOT-repeated exposure::**

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

| <b>Hazardous substances<br/>CAS-No.</b> | <b>Result / Value</b> | <b>Route of<br/>application</b> | <b>Exposure time /<br/>Frequency of<br/>treatment</b> | <b>Species</b> | <b>Method</b>   |
|---|-----------------------|---------------------------------|---|----------------|---|
| Hydroquinone<br>123-31-9                | NOAEL 50 mg/kg        | oral: gavage                    | 13 w<br>5 d/w   | rat            | not specified   |
| Hydroquinone<br>123-31-9                | NOAEL 73,9 mg/kg      | dermal                          | 13 w<br>6 h/d, 5 d/w                                  | rat            | equivalent or similar to<br>OECD Guideline 411<br>(Subchronic Dermal<br>Toxicity: 90-Day Study) |

**Aspiration hazard:**

No data available.

## SECTION 12: Ecological information

### General ecological information:

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

Biological and Chemical Oxygen Demands (BOD and COD) are insignificant.

### 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  |
|---|---------------|------------|---------------|---------------------|---|
| Bismaleimide<br>105391-33-1                                       | LC50          | 0,5 mg/l   | 48 h          | Oryzias latipes     | OECD Guideline 203 (Fish,<br>Acute Toxicity Test) |
| Bis(2-hydroxy-3-tert-butyl-5-<br>methylphenyl)methane<br>119-47-1 | LC50          |            |               | Oryzias latipes     | OECD Guideline 203 (Fish,<br>Acute Toxicity Test) |
| Hydroquinone<br>123-31-9  | LC50          | 0,638 mg/l | 96 h          | Oncorhynchus mykiss | 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   |
|---|---------------|---------------|---------------|---------------|--|
| Bismaleimide<br>105391-33-1                                       | EC50          | > 1 - 10 mg/l | 48 h          | Daphnia magna | OECD Guideline 202<br>(Daphnia sp. Acute<br>Immobilisation Test) |
| Bis(2-hydroxy-3-tert-butyl-5-<br>methylphenyl)methane<br>119-47-1 | EC50          |               | 48 h          | Daphnia magna | OECD Guideline 202<br>(Daphnia sp. Acute<br>Immobilisation Test) |
| Hydroquinone<br>123-31-9  | EC50          | 0,134 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   |
|---|---------------|-------------|---------------|---------------|--|
| Bis(2-hydroxy-3-tert-butyl-5-<br>methylphenyl)methane<br>119-47-1 | NOEC          |             |               | Daphnia magna | OECD 211 (Daphnia<br>magna, Reproduction Test) |
| Hydroquinone<br>123-31-9  | NOEC          | 0,0057 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   |
|---|---------------|------------|---------------|---|--|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | EC50          |            | 72 h          | Pseudokirchneriella subcapitata<br>(reported as Selenastrum<br>capricornutum) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | NOEC          |            | 72 h          | Pseudokirchneriella subcapitata<br>(reported as Selenastrum<br>capricornutum) | OECD Guideline 201 (Alga,<br>Growth Inhibition Test) |
| Hydroquinone<br>123-31-9                                      | EC50          | 0,335 mg/l | 72 h          | Selenastrum capricornutum<br>(new name: Pseudokirchneriella<br>subcapitata)   | OECD Guideline 201 (Alga,<br>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   |
|---|---------------|---------------|---------------|---------|--|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | EC 50         | > 10.000 mg/l | 3 h           |         | OECD Guideline 209<br>(Activated Sludge,<br>Respiration Inhibition Test) |
| Hydroquinone<br>123-31-9                                      | EC 50         | 0,038 mg/l    | 30 min        |         | not specified  |

#### 12.2. Persistence and degradability

No data available for the product.

| Hazardous substances<br>CAS-No.                               | Result  | Test type | Degradability | Exposure<br>time | Method  |
|---|---|-----------|---------------|------------------|---|
| Bismaleimide<br>105391-33-1                                   | not readily biodegradable.                          | aerobic   | > 0 - < 60 %  | 28 d             | OECD 301 A - F  |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | under test conditions no<br>biodegradation observed | aerobic   | 0 %           | 28 d             | OECD Guideline 301 C (Ready<br>Biodegradability: Modified MITI<br>Test (I))                 |
| Hydroquinone<br>123-31-9                                      | readily biodegradable                               | aerobic   | 75 - 81 %     | 30 d             | EU Method C.4-E (Determination<br>of the "Ready"<br>Biodegradability Closed Bottle<br>Test) |

#### 12.3. Bioaccumulative potential

No data available for the product.

| Hazardous substances<br>CAS-No.                               | Bioconcentratio<br>n factor (BCF) | Exposure time | Temperature | Species         | Method   |
|---|-----------------------------------|---------------|-------------|-----------------|--|
| Bismaleimide<br>105391-33-1                                   | 674                               |               |             | not specified   | OECD Guideline 305<br>(Bioconcentration: Flow-through<br>Fish Test)  |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | 320 - 780                         | 60 d          |             | Cyprinus carpio | OECD Guideline 305 E<br>(Bioaccumulation: Flow-through<br>Fish Test) |

#### 12.4. Mobility in soil

Cured adhesives are immobile.

| Hazardous substances<br>CAS-No.                               | LogPow | Temperature | Method   |
|---|--------|-------------|--|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | 6,25   | 20 °C       | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Hydroquinone<br>123-31-9                                      | 0,59   |             | EU Method A.8 (Partition Coefficient)  |

### 12.5. Results of PBT and vPvB assessment

| Hazardous substances<br>CAS-No.                               | PBT / vPvB  |
|---|---|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Hydroquinone<br>123-31-9                                      | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

### 12.6. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

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

Waste code

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

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

## 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 | 3334                |

### 14.2. UN proper shipping name

|      |   |
|------|---|
| ADR  | Not dangerous goods                                     |
| RID  | Not dangerous goods                                     |
| ADN  | Not dangerous goods                                     |
| IMDG | Not dangerous goods                                     |
| IATA | Aviation regulated liquid, n.o.s. (Cyanoacrylate ester) |

### 14.3. Transport hazard class(es)

|      |                     |
|------|---------------------|
| ADR  | Not dangerous goods |
| RID  | Not dangerous goods |
| ADN  | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | 9                   |

### 14.4. Packing group

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

### 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 | Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted. |

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

not applicable

## SECTION 15: Regulatory information

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

VOC content < 3,00 %  
(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:

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic 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.**