



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

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LOCTITE HY 4070

SDS No. : 592633  
V001.1

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Replaces version from: 07.02.2017

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

#### 1.1. Product identifier

LOCTITE HY 4070

#### Contains:

Ethyl 2-cyanoacrylate

#### 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):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure Category 3

H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

#### 2.2. Label elements

##### Label elements (CLP):

Hazard pictogram:



|  |  |
|--|--|
| <b>Signal word:</b>                            | Warning  |
| <b>Hazard statement:</b>                       | H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.  |
| <b>Supplemental information</b>                | EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.<br>Contains Methyl acrylate. May produce an allergic reaction.  |
| <b>Precautionary statement:<br/>Prevention</b> | P261 Avoid breathing vapours.<br>P280 Wear protective gloves/eye protection.   |
| <b>Precautionary statement:<br/>Response</b>   | P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P337+P313 If eye irritation persists: Get medical advice/attention. |
| <b>Precautionary statement:<br/>Disposal</b>   | 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  |
|---|-------------------------------|---------------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0                            | 230-391-5<br>01-2119527766-29 | 50- 100 %     | Eye Irrit. 2<br>H319<br>STOT SE 3<br>H335<br>Skin Irrit. 2<br>H315  |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | 204-327-1<br>01-2119496065-33 | 0,3- < 3 %    | Repr. 2<br>H361   |
| Methyl acrylate<br>96-33-3                                    | 202-500-6<br>01-2119459302-44 | 0,1- < 0,25 % | Acute Tox. 4; Oral<br>H302<br>Acute Tox. 4; Dermal<br>H312<br>Flam. Liq. 2<br>H225<br>STOT SE 3<br>H335<br>Eye Irrit. 2<br>H319<br>Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Acute Tox. 3; Inhalation<br>H331<br>Aquatic Chronic 3<br>H412 |
| 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**

**EYE:** Irritation, conjunctivitis.

**SKIN:** Redness, inflammation.

**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:**

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

**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 let product enter drains.

**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.

**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  
See advice in section 8  
Avoid skin and eye contact.

Hygiene measures:

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

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

Ensure good ventilation/extraction.  
Store in a cool, dry place.  
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 |
|---|-----|-------------------|-----------------------------------|--|-----------------|
| Ethyl 2-cyanoacrylate<br>7085-85-0<br>[ETHYL CYANOACRYLATE] | 0,3 | 1,5               | Short Term Exposure Limit (STEL): |  | EH40 WEL        |
| Methyl acrylate<br>96-33-3<br>[METHYL ACRYLATE]             | 5   | 18                | Time Weighted Average (TWA):      |  | EH40 WEL        |
| Methyl acrylate<br>96-33-3<br>[METHYL ACRYLATE]             | 10  | 36                | Short Term Exposure Limit (STEL): |  | EH40 WEL        |
| Methyl acrylate<br>96-33-3<br>[METHYLACRYLATE]              | 5   | 18                | Time Weighted Average (TWA):      | Indicative                                   | ECLTV           |
| Methyl acrylate<br>96-33-3<br>[METHYLACRYLATE]              | 10  | 36                | Short Term Exposure Limit (STEL): | Indicative                                   | ECLTV           |
| 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 |
|---|-----|-------------------|-----------------------------------|--|-----------------|
| Ethyl 2-cyanoacrylate<br>7085-85-0<br>[ETHYL CYANOACRYLATE] | 0,2 |                   | Time Weighted Average (TWA):      |  | IR_OEL          |
| Methyl acrylate<br>96-33-3<br>[METHYLACRYLATE]              | 5   | 18                | Time Weighted Average (TWA):      | Indicative                                   | ECLTV           |
| Methyl acrylate<br>96-33-3<br>[METHYLACRYLATE]              | 10  | 36                | Short Term Exposure Limit (STEL): | Indicative                                   | ECLTV           |
| Methyl acrylate<br>96-33-3<br>[METHYL ACRYLATE]             | 5   | 18                | Time Weighted Average (TWA):      | Indicative OELV                              | IR_OEL          |
| Methyl acrylate<br>96-33-3<br>[METHYL ACRYLATE]             | 10  | 36                | Short Term Exposure Limit (STEL): | Indicative OELV                              | IR_OEL          |
| Methyl acrylate<br>96-33-3<br>[METHYL ACRYLATE]             |     |                   | Skin designation:                 | Can be absorbed through the skin.            | IR_OEL          |
| 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     |              |         |
| Methyl acrylate 96-33-3                               | aqua (freshwater)            |                 |              |     |              | 0,00272 mg/L |         |
| Methyl acrylate 96-33-3                               | aqua (marine water)          |                 |              |     |              | 0,00027 mg/L |         |
| Methyl acrylate 96-33-3                               | aqua (intermittent releases) |                 |              |     |              | 0,011 mg/L   |         |
| Methyl acrylate 96-33-3                               | sewage treatment plant (STP) |                 |              |     |              | 10 mg/L      |         |
| Methyl acrylate 96-33-3                               | sediment (freshwater)        |                 |              |     | 0,0115 mg/kg |              |         |
| Methyl acrylate 96-33-3                               | sediment (marine water)      |                 |              |     | 0,0115 mg/kg |              |         |
| Methyl acrylate 96-33-3                               | soil                         |                 |              |     | 1 mg/kg      |              |         |
| Methyl acrylate 96-33-3                               | oral                         |                 |              |     | 0,0011 mg/kg |              |         |
| Hydroquinone 123-31-9                                 | aqua (freshwater)            |                 | 0,114 µg/l   |     |              |              |         |
| Hydroquinone 123-31-9                                 | aqua (marine water)          |                 | 0,0114 µg/l  |     |              |              |         |
| Hydroquinone 123-31-9                                 | sediment (freshwater)        |                 |              |     | 0,98 µg/kg   |              |         |
| Hydroquinone 123-31-9                                 | sediment (marine water)      |                 |              |     | 0,097 µg/kg  |              |         |
| Hydroquinone 123-31-9                                 | aqua (intermittent releases) |                 | 0,00134 mg/l |     |              |              |         |
| Hydroquinone 123-31-9                                 | soil                         |                 |              |     | 0,129 µg/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 |
|--|--------------------|-------------------|--|---------------|-------------------------|---------|
| Ethyl 2-cyanoacrylate<br>7085-85-0                       | Workers            | Inhalation        | Long term exposure - local effects           |               | 9,25 mg/m <sup>3</sup>  |         |
| Ethyl 2-cyanoacrylate<br>7085-85-0                       | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 9,25 mg/m <sup>3</sup>  |         |
| Ethyl 2-cyanoacrylate<br>7085-85-0                       | General population | Inhalation        | Long term exposure - local effects           |               | 9,25 mg/m <sup>3</sup>  |         |
| Ethyl 2-cyanoacrylate<br>7085-85-0                       | General population | Inhalation        | Long term exposure - systemic effects        |               | 9,25 mg/m <sup>3</sup>  |         |
| 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             |         |
| Methyl acrylate<br>96-33-3                               | Workers            | inhalation        | Long term exposure - local effects           |               | 18 mg/m <sup>3</sup>    |         |
| Methyl acrylate<br>96-33-3                               | Workers            | dermal            | Acute/short term exposure - local effects    |               | 0,49 mg/cm <sup>2</sup> |         |
| Methyl acrylate<br>96-33-3                               | General population | inhalation        | Acute/short term exposure - local effects    |               | 2,1 mg/m <sup>3</sup>   |         |
| Hydroquinone<br>123-31-9                                 | Workers            | dermal            | Long term exposure - systemic effects        |               | 128 mg/kg               |         |
| Hydroquinone<br>123-31-9                                 | Workers            | Inhalation        | Long term exposure - systemic effects        |               | 7 mg/m <sup>3</sup>     |         |
| Hydroquinone<br>123-31-9                                 | Workers            | Inhalation        | Long term exposure - local effects           |               | 1 mg/m <sup>3</sup>     |         |
| Hydroquinone<br>123-31-9                                 | General population | dermal            | Long term exposure - systemic effects        |               | 64 mg/kg                |         |
| Hydroquinone<br>123-31-9                                 | General population | Inhalation        | Long term exposure - systemic effects        |               | 1,74 mg/m <sup>3</sup>  |         |
| Hydroquinone<br>123-31-9                                 | General population | Inhalation        | Long term exposure - local effects           |               | 0,5 mg/m <sup>3</sup>   |         |



**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:

The use of chemical resistant gloves such as Nitrile is recommended.

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.

Eye protection:

Wear protective glasses.

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                             | gel<br>gel<br>Clear, colourless    |
| Odor                                   | irritating                         |
| Odour threshold                        | No data available / Not applicable |
| pH                                     | No data available / Not applicable |
| Initial boiling point                  | 149 °C (300.2 °F)                  |
| Flash point                            | 80 - 93 °C (176 - 199.4 °F)        |
| Decomposition temperature              | No data available / Not applicable |
| Vapour pressure                        | No data available / Not applicable |
| 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)               | No data available / Not applicable |
| 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  
Oxidising properties

No data available / Not applicable  
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

### 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:

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.

#### Inhalative toxicity:

May cause respiratory irritation.

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

#### Skin irritation:

Causes skin 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

#### Eye irritation:

Causes serious eye irritation.

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

#### Sensitizing:

May cause allergic reaction.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No.                               | Value<br>type | Value          | Route of<br>application | Exposure<br>time | Species | Method  |
|---|---------------|----------------|-------------------------|------------------|---------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0                            | LD50          | > 5.000 mg/kg  | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity)<br>not specified |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | LD50          | > 10.000 mg/kg | oral                    |                  | rat     |   |
| Methyl acrylate<br>96-33-3                                    | LD50          | 768 mg/kg      | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity)                  |
| Hydroquinone<br>123-31-9                                      | LD50          | 367 mg/kg      | oral                    |                  | rat     | OECD Guideline 401 (Acute Oral Toxicity)                  |

**Acute inhalative toxicity:**

| Hazardous components<br>CAS-No. | Value<br>type | Value    | Route of<br>application | Exposure<br>time | Species | Method   |
|---------------------------------|---------------|----------|-------------------------|------------------|---------|--|
| Methyl acrylate<br>96-33-3      | LC50          | 6,5 mg/l | Vapor.                  | 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  |
|---|---------------|----------------|-------------------------|------------------|---------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0                            | LD50          | > 2.000 mg/kg  | dermal                  |                  | rabbit  | OECD Guideline 402 (Acute Dermal Toxicity)<br>not specified |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | LD50          | > 10.000 mg/kg | dermal                  |                  | rat     |   |
| Methyl acrylate<br>96-33-3                                    | LD50          | 1.250 mg/kg    | dermal                  |                  | rabbit  | Draize Test   |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No.    | Result              | Exposure<br>time | Species | Method   |
|------------------------------------|---------------------|------------------|---------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | slightly irritating | 24 h             | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Methyl acrylate<br>96-33-3         | irritating          | 4 h              | rabbit  | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No.    | Result     | Exposure<br>time | Species | Method  |
|------------------------------------|------------|------------------|---------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | irritating | 72 h             | rabbit  | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No.    | Result          | Test type                           | Species    | Method  |
|------------------------------------|-----------------|-------------------------------------|------------|---|
| Ethyl 2-cyanoacrylate<br>7085-85-0 | not sensitising |                                     | guinea pig | not specified   |
| Methyl acrylate<br>96-33-3         | sensitising     | Mouse local lymph node assay (LLNA) | mouse      | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Hydroquinone<br>123-31-9           | sensitising     | Guinea pig maximisation test        | guinea pig | not specified   |

**Germ cell mutagenicity:**

| Hazardous components CAS-No.                               | Result   | Type of study / Route of administration          | Metabolic activation / Exposure time | Species | Method   |
|--|----------|--|--------------------------------------|---------|--|
| Ethyl 2-cyanoacrylate 7085-85-0                            | negative | bacterial reverse mutation assay (e.g Ames test) |                                      |         | OECD Guideline 471 (Bacterial Reverse Mutation Assay)              |
|  | negative | mammalian cell gene mutation assay               | with and without                     |         | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)    |
|  | negative | in vitro mammalian chromosome aberration test    | with and without                     |         | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| 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)              |
| Methyl acrylate 96-33-3                                    | negative | inhalation: vapour                               |                                      | mouse   | not specified  |
| Hydroquinone 123-31-9                                      | negative | bacterial reverse mutation assay (e.g Ames test) | with and without                     |         | EU Method B.13/14 (Mutagenicity)                                   |

**Carcinogenicity:**

| Hazardous components CAS-No. | Result           | Species | Sex         | Exposure time/Frequency of treatment | Route of application  | Method   |
|------------------------------|------------------|---------|-------------|--------------------------------------|-----------------------|--|
| Methyl acrylate 96-33-3      | not carcinogenic | rat     | male/female | 24 m<br>6 h/d, 5 d/w                 | inhalation:<br>vapour | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

**Reproductive toxicity:**

| Hazardous substances CAS-No.                               | Result / Classification | Species                   | Exposure time | Species | Method  |
|--|-------------------------|---------------------------|---------------|---------|---|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | NOAEL P = 12,5 mg/kg    | screening<br>oral: gavage |               | rat     | OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test) |

**Repeated dose toxicity**

| Hazardous components CAS-No. | Result             | Route of application    | Exposure time / Frequency of treatment | Species | Method   |
|------------------------------|--------------------|-------------------------|--|---------|--|
| Methyl acrylate 96-33-3      | NOAEL=23 ppm       | inhalation              | 13 weeks 6 hrs/day, 5 days/wk          | rat     | BASF Test  |
| Methyl acrylate 96-33-3      | LOAEL=20 mg/kg     | oral:<br>drinking water | 13 wcontinuous                         | rat     | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Methyl acrylate 96-33-3      | NOAEL=5 mg/kg      | oral:<br>drinking water | 13 wcontinuous                         | rat     | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Hydroquinone 123-31-9        | NOAEL=>= 250 mg/kg | oral: gavage            | 14 days 5 days/week.<br>12 doses       | rat     | OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |
| Hydroquinone 123-31-9        | LOAEL=<= 500 mg/kg | oral: gavage            | 14 days 5 days/week.<br>12 doses       | rat     | OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |

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

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

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.

| Hazardous components<br>CAS-No.                               | Value<br>type | Value         | Acute<br>Toxicity<br>Study | Exposure<br>time | Species   | Method   |
|---|---------------|---------------|----------------------------|------------------|---|--|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | EC 50         | > 10.000 mg/l | Bacteria                   | 3 h              |   | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Methyl acrylate<br>96-33-3                                    | LC50          | 3,4 mg/l      | Fish                       | 96 h             | Oncorhynchus mykiss   | OECD Guideline 203 (Fish, Acute Toxicity Test)                     |
| Methyl acrylate<br>96-33-3                                    | EC50          | 2,6 mg/l      | Daphnia                    | 48 h             | Daphnia magna   | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)         |
| Methyl acrylate<br>96-33-3                                    | EC50          | 3,55 mg/l     | Algae                      | 72 h             | Selenastrum capricornutum<br>(new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test)<br>not specified |
| Methyl acrylate<br>96-33-3                                    | EC10          | > 100 mg/l    | Bacteria                   | 72 h             |   |  |
| Methyl acrylate<br>96-33-3                                    | NOEC          | 0,19 mg/l     | chronic<br>Daphnia         | 21 d             | Daphnia magna   | EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)                   |
| Hydroquinone<br>123-31-9                                      | LC50          | 0,638 mg/l    | Fish                       | 96 h             | Oncorhynchus mykiss   | OECD Guideline 203 (Fish, Acute Toxicity Test)                     |
| Hydroquinone<br>123-31-9                                      | EC50          | 0,134 mg/l    | Daphnia                    | 48 h             | Daphnia magna   | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)         |
| Hydroquinone<br>123-31-9                                      | EC50          | 0,335 mg/l    | Algae                      | 72 h             | Selenastrum capricornutum<br>(new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test)<br>not specified |
| Hydroquinone<br>123-31-9                                      | EC 50         | 0,038 mg/l    | Bacteria                   | 30 min           |   |  |
| Hydroquinone<br>123-31-9                                      | NOEC          | 0,0057 mg/l   | chronic<br>Daphnia         | 21 d             | Daphnia magna   | OECD 211 (Daphnia magna, Reproduction Test)                        |

**12.2. Persistence and degradability****Persistence and Biodegradability:**

The product is not biodegradable.

| Hazardous components<br>CAS-No.                               | Result   | Route of<br>application | Degradability | Method   |
|---|--|-------------------------|---------------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0                            |  | aerobic                 | 57 %          | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)                              |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | under test conditions no biodegradation observed | aerobic                 | 0 %           | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))                          |
| Methyl acrylate<br>96-33-3                                    | readily biodegradable                            | aerobic                 | 90 - 100 %    | OECD Guideline 310 (Ready Biodegradability/CO <sub>2</sub> in Sealed Vessels (Headspace Test)) |
| Hydroquinone<br>123-31-9                                      | readily biodegradable                            | aerobic                 | 75 - 81 %     | EU Method C.4-E (Determination of the "Ready" Biodegradability/Closed Bottle Test)             |

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

Cured adhesives are immobile.

**Bioaccumulative potential:**

No data available for the product.

| Hazardous components<br>CAS-No.                               | LogPow | Bioconcentration<br>factor (BCF) | Exposure<br>time | Species         | Temperature | Method   |
|---|--------|----------------------------------|------------------|-----------------|-------------|--|
| Ethyl 2-cyanoacrylate<br>7085-85-0                            | 0,776  |                                  |                  |                 | 22 °C       | EU Method A.8 (Partition Coefficient)  |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 | 6,25   | 320 - 780                        | 60 d             | Cyprinus carpio | 20 °C       | OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)                     |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane<br>119-47-1 |        |                                  |                  |                 |             | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Methyl acrylate<br>96-33-3                                    | 0,739  | 3,16                             |                  |                 | 25 °C       | not specified  |
| Methyl acrylate<br>96-33-3                                    |        |                                  |                  |                 |             | 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 components<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. |
| Methyl acrylate<br>96-33-3                                    | 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:

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

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.

Disposal must be made according to official regulations.

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 | Not more than 500 ml (each inner package) - 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 %  
(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:

- H225 Highly flammable liquid and vapor.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H335 May cause respiratory irritation.
- 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.
- H412 Harmful 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.

**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.**

## Annex - Exposure Scenarios:

Exposure Scenarios for ethyl 2-cyanoacrylate can be downloaded under the following link:  
[http://mymsds.henkel.com/mymsds/.470833..en.ANNEX\\_DE.15743123.0.DE.pdf](http://mymsds.henkel.com/mymsds/.470833..en.ANNEX_DE.15743123.0.DE.pdf)  
Alternatively they can be accessed on the internet site [www.mymsds.henkel.com](http://www.mymsds.henkel.com) by entering number 470833.