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



SDS No. : 464584
V005.0

Loctite 3295A

Revision: 12.09.2017
printing date: 15.05.2018
Replaces version from: 21.07.2016

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

**1.1. Product identifier**
Loctite 3295A

**Contains:**
Methyl methacrylate
Methacrylic acid
1-Methyltrimethylene dimethacrylate
Epoxy resin (number average molecular weight ≤ 700)

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use:
Acrylic Adhesive

**1.3. Details of the supplier of the safety data sheet**
Henkel 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):**

| | |
|---|---|
| Flammable liquids | Category 2 |
| H225 Highly flammable liquid and vapor. | |
| 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. | |
| Serious eye damage | Category 1 |
| H318 Causes serious eye damage. | |
| Skin irritation | Category 2 |
| H315 Causes skin irritation. | |

**2.2. Label elements**

**Label elements (CLP):**

| | |
|---|---|
| **Hazard pictogram:** |  |
| **Signal word:** | Danger |
| **Hazard statement:** | H225 Highly flammable liquid and vapor.<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H318 Causes serious eye damage.<br>H335 May cause respiratory irritation.<br>H412 Harmful to aquatic life with long lasting effects. |
| **Supplemental information** | For use in industrial installations only. |
| **Precautionary statement: Prevention** | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P261 Avoid breathing vapours.<br>P273 Avoid release to the environment.<br>P280 Wear protective gloves/eye protection. |
| **Precautionary statement: Response** | P302+P352 IF ON SKIN: Wash with plenty of soap and water.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

**2.3. Other hazards**

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.
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:**

Part A of two part 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 |
|---|---|---|---|
| Methyl methacrylate<br>80-62-6 | 201-297-1<br>01-2119452498-28 | 40- 60 % | Flam. Liq. 2<br>H225<br>STOT SE 3<br>H335<br>Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317 |
| Methacrylic acid<br>79-41-4 | 201-204-4<br>01-2119463884-26 | 5- < 10 % | Acute Tox. 4; Oral<br>H302<br>Acute Tox. 3; Dermal<br>H311<br>Acute Tox. 4; Inhalation<br>H332<br>Skin Corr. 1A<br>H314 |
| 1-Methyltrimethylene dimethacrylate<br>1189-08-8 | 214-711-0<br>01-2119969461-31 | 0,1- < 1 % | Skin Sens. 1B<br>H317 |
| Epoxy resin (number average molecular weight ≤ 700)<br>25068-38-6 | 500-033-5<br>500-033-5<br>01-2119456619-26 | 0,1- < 1 % | Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317<br>Eye Irrit. 2<br>H319<br>Aquatic Chronic 2<br>H411 |
| Cumene hydroperoxide<br>80-15-9 | 201-254-7 | 0,1- < 1 % | 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 |
| Butyl hydroxytoluene<br>128-37-0 | 204-881-4<br>01-2119480433-40<br>01-2119555270-46<br>01-2119565113-46 | 0,1- < 1 % | Aquatic Acute 1<br>H400<br>Aquatic Chronic 1<br>H410 |
| 1,1,2-Trichloroethane<br>79-00-5 | 201-166-9 | 0,1- < 1 % | Carc. 2<br>H351<br>Acute Tox. 4; Dermal<br>H312<br>Acute Tox. 4; Oral<br>H302<br>Acute Tox. 4; Inhalation<br>H332 |

**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 if necessary.

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: Rash, Urticaria.

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

SKIN: Redness, inflammation.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

**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 (CO2) and nitrogen oxides (NOx) 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 contact with skin and eyes.
Ensure adequate ventilation.
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**
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.
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.
Avoid skin and eye contact.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.
Vapours should be extracted to avoid inhalation.
See advice in section 8

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**

Keep away from sources of ignition.
Refer to Technical Data Sheet

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

Acrylic Adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Occupational Exposure Limits**

Valid for
Great Britain

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|---|---|---|---|---|
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | 416 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | 208 | Time Weighted Average (TWA): | | EH40 WEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | | Short Term Exposure Limit (STEL): | Indicative | ECTLV |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | | Time Weighted Average (TWA): | Indicative | ECTLV |
| Methacrylic acid<br>79-41-4<br>[METHACRYLIC ACID] | 40 | 143 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| Methacrylic acid<br>79-41-4<br>[METHACRYLIC ACID] | 20 | 72 | Time Weighted Average (TWA): | | EH40 WEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 2 | Time Weighted Average (TWA): | | EH40 WEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 6 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0<br>[2,6-DI-TERT-BUTYL-P-CRESOL] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |

**Occupational Exposure Limits**

Valid for
Ireland

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|---|---|---|---|---|
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | | Time Weighted Average (TWA): | Indicative OELV | IR_OEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | | Short Term Exposure Limit (STEL): | Indicative OELV | IR_OEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | | Short Term Exposure Limit (STEL): | Indicative | ECTLV |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | | Time Weighted Average (TWA): | Indicative | ECTLV |
| Methacrylic acid<br>79-41-4<br>[METHACRYLIC ACID] | 20 | 70 | Time Weighted Average (TWA): | | IR_OEL |
| Methacrylic acid<br>79-41-4<br>[METHACRYLIC ACID] | 40 | 140 | Short Term Exposure Limit (STEL): | | IR_OEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 2 | Time Weighted Average (TWA): | | IR_OEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 6 | Short Term Exposure Limit (STEL): | | IR_OEL |
| 2,6-di-tert-Butyl-p-cresol<br>128-37-0 | | 10 | Time Weighted Average (TWA): | | IR_OEL |

| | | | | | |
|---|---|---|---|---|---|
| [2,6-DITERTIARY-BUTYL-PARA-CRESOL] | | | | | |
| 1,1,2-Trichloroethane<br>79-00-5<br>[1,1,2-TRICHLOROETHANE] | 10 | 45 | Time Weighted Average (TWA): | | IR_OEL |
| 1,1,2-Trichloroethane<br>79-00-5<br>[1,1,2-TRICHLOROETHANE] | | | Skin designation: | Can be absorbed through the skin. | IR_OEL |

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

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | mg/l | ppm | mg/kg | others | |
| Methyl methacrylate 80-62-6 | aqua (freshwater) | | 0,94 mg/l | | | | |
| Methyl methacrylate 80-62-6 | aqua (marine water) | | 0,94 mg/l | | | | |
| Methyl methacrylate 80-62-6 | aqua (intermittent releases) | | 0,94 mg/l | | | | |
| Methyl methacrylate 80-62-6 | sewage treatment plant (STP) | | 10 mg/l | | | | |
| Methyl methacrylate 80-62-6 | sediment (freshwater) | | | | 5,74 mg/kg | | |
| Methyl methacrylate 80-62-6 | soil | | | | 1,47 mg/kg | | |
| Methacrylic acid 79-41-4 | aqua (freshwater) | | 0,82 mg/l | | | | |
| Methacrylic acid 79-41-4 | aqua (marine water) | | 0,82 mg/l | | | | |
| Methacrylic acid 79-41-4 | sewage treatment plant (STP) | | 10 mg/l | | | | |
| Methacrylic acid 79-41-4 | aqua (intermittent releases) | | 0,82 mg/l | | | | |
| Methacrylic acid 79-41-4 | soil | | | | 1,2 mg/kg | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | aqua (freshwater) | | 0,006 mg/l | | | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | aqua (marine water) | | 0,001 mg/l | | | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | aqua (intermittent releases) | | 0,018 mg/l | | | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | sewage treatment plant (STP) | | 10 mg/l | | | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | sediment (freshwater) | | | | 0,996 mg/kg | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | sediment (marine water) | | | | 0,1 mg/kg | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | soil | | | | 0,196 mg/kg | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | oral | | | | 11 mg/kg | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | aqua (freshwater) | | 0,0031 mg/l | | | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | aqua (marine water) | | 0,00031 mg/l | | | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | aqua (intermittent releases) | | 0,031 mg/l | | | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | Sewage treatment plant | | 0,35 mg/l | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | sediment (freshwater) | | | | 0,023 mg/kg | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | sediment (marine water) | | | | 0,0023 mg/kg | | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | soil | | | | 0,0029 mg/kg | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | soil | | | | 47,69 µg/kg | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | sewage treatment plant (STP) | | 0,17 mg/l | | | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | sediment (freshwater) | | | | 99,6 µg/kg | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | oral | | | | 8,33 mg/kg | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | aqua (marine water) | | 0,02 µg/l | | | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | aqua (freshwater) | | 0,199 µg/l | | | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | sediment (marine water) | | | | 9,96 µg/kg | | |
| 2,6-Di-tert-butyl-p-cresol 128-37-0 | aqua (intermittent releases) | | 0,00199 mg/l | | | | |

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

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | Workers | dermal | Acute/short term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | Workers | dermal | Long term exposure - systemic effects | | 13,67 mg/kg | |
| Methyl methacrylate 80-62-6 | Workers | Inhalation | Long term exposure - systemic effects | | 208 mg/m3 | |
| Methyl methacrylate 80-62-6 | Workers | dermal | Long term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | Workers | Inhalation | Long term exposure - local effects | | 208 mg/m3 | |
| Methyl methacrylate 80-62-6 | General population | dermal | Acute/short term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | General population | dermal | Long term exposure - systemic effects | | 8,2 mg/kg | |
| Methyl methacrylate 80-62-6 | General population | Inhalation | Long term exposure - systemic effects | | 74,3 mg/m3 | |
| Methyl methacrylate 80-62-6 | General population | dermal | Long term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | General population | Inhalation | Long term exposure - local effects | | 105 mg/m3 | |
| Methacrylic acid 79-41-4 | Workers | Inhalation | Long term exposure - local effects | | 88 mg/m3 | |
| Methacrylic acid 79-41-4 | Workers | Inhalation | Long term exposure - systemic effects | | 29,6 mg/m3 | |
| Methacrylic acid 79-41-4 | Workers | dermal | Long term exposure - systemic effects | | 4,25 mg/kg | |
| Methacrylic acid 79-41-4 | General population | Inhalation | Long term exposure - local effects | | 6,55 mg/m3 | |
| Methacrylic acid 79-41-4 | General population | Inhalation | Long term exposure - systemic effects | | 6,3 mg/m3 | |
| Methacrylic acid 79-41-4 | General population | dermal | Long term exposure - systemic effects | | 2,55 mg/kg | |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | Workers | inhalation | Long term exposure - systemic effects | | 14,5 mg/m3 | |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | Workers | dermal | Long term exposure - systemic effects | | 4,2 mg/kg | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | Workers | dermal | Acute/short term exposure - systemic effects | | 8,33 mg/kg | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | Workers | Inhalation | Acute/short term exposure - systemic effects | | 12,25 mg/m3 | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | Workers | dermal | Long term exposure - systemic effects | | 8,33 mg/kg | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6 | Workers | Inhalation | Long term exposure - systemic effects | | 12,25 mg/m3 | |
| Reaction product: bisphenol-A- | General | dermal | Acute/short term | | 3,571 mg/kg | |

| | | | | | | |
|---|---|---|---|---|---|---|
| (epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | population | | exposure - systemic effects | | | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | dermal | Long term exposure - systemic effects | | 3,571 mg/kg | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | Inhalation | Acute/short term exposure - systemic effects | | 0,75 mg/m3 | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | Inhalation | Long term exposure - systemic effects | | 0,75 mg/m3 | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | oral | Acute/short term exposure - systemic effects | | 0,75 mg/kg | |
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)<br>25068-38-6 | General population | oral | Long term exposure - systemic effects | | 0,75 mg/kg | |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide<br>80-15-9 | Workers | inhalation | Long term exposure - systemic effects | | 6 mg/m3 | |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Workers | inhalation | Long term exposure - systemic effects | | 3,5 mg/m3 | |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | Workers | dermal | Long term exposure - systemic effects | | 0,5 mg/kg | |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | inhalation | Long term exposure - systemic effects | | 0,86 mg/m3 | |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | dermal | Long term exposure - systemic effects | | 0,25 mg/kg | |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0 | General population | oral | Long term exposure - systemic effects | | 0,25 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:
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:
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 | liquid<br>yellow |
| Odor | mild |
| 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 | > 75 °C (> 167 °F) |
| Flash point | < 21 °C (< 69.8 °F) |
| Evaporation rate | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Explosive limits | No data available / Not applicable |
| Vapour pressure | < 53 mbar |
| Relative vapour density: | No data available / Not applicable |
| Density<br>() | 1,05 g/cm3 |
| Bulk density | No data available / Not applicable |
| Solubility | No data available / Not applicable |
| Solubility (qualitative)<br>(Solvent: Water) | Not miscible |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Auto-ignition temperature | No data available / Not applicable |
| Decomposition temperature | No data available / Not applicable |
| Viscosity<br>(Brookfield; Instrument: RVT; 25 °C (77 °F); Spindle No: 6) | 13.000,0 - 19.000,0 mPa.s |
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

**9.2. Other information**

No data available / Not applicable

## SECTION 10: Stability and reactivity

**10.1. Reactivity**
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**
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:**
May cause irritation to the digestive tract.

**Skin irritation:**
Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.
Causes skin irritation.

**Eye irritation:**
Causes serious eye damage.

**Sensitizing:**
May cause an allergic skin reaction.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Methacrylic acid<br>79-41-4 | LD50 | 1.320 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| 1-Methyltrimethylene dimethacrylate<br>1189-08-8 | LD50 | > 5.000 mg/kg | oral | | rat | not specified |
| Epoxy resin (number average molecular weight ≤ 700)<br>25068-38-6 | LD50 | > 2.000 mg/kg | oral | | rat | OECD Guideline 420 (Acute Oral Toxicity) |
| Cumene hydroperoxide<br>80-15-9 | LD50 | 550 mg/kg | oral | | rat | not specified |
| Butyl hydroxytoluene<br>128-37-0 | LD50 | > 5.000 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |

**Acute inhalative toxicity:**

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Methacrylic acid 79-41-4 | LC50 | > 3,6 mg/l | aerosol | 4 h | rat | OECD Guideline 403 (Acute Inhalation Toxicity) |

**Acute dermal toxicity:**

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Methacrylic acid 79-41-4 | Acute toxicity estimate (ATE) | 500 mg/kg | dermal | | | Expert judgement |
| Methacrylic acid 79-41-4 | LD50 | 500 - 1.000 mg/kg | | | rabbit | Dermal Toxicity Screening |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | LD50 | > 3.000 mg/kg | dermal | | rabbit | not specified |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | LD50 | > 2.000 mg/kg | dermal | | rat | not specified |
| Cumene hydroperoxide 80-15-9 | LD50 | 1.200 - 1.520 mg/kg | dermal | | | not specified |
| Butyl hydroxytoluene 128-37-0 | LD50 | > 2.000 mg/kg | dermal | | rat | OECD Guideline 402 (Acute Dermal Toxicity) |

**Skin corrosion/irritation:**

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Methacrylic acid 79-41-4 | Category 1A (corrosive) | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | moderately irritating | 24 h | rabbit | Draize Test |
| Cumene hydroperoxide 80-15-9 | corrosive | | rabbit | Draize Test |
| Butyl hydroxytoluene 128-37-0 | slightly irritating | 24 h | rabbit | not specified |

**Serious eye damage/irritation:**

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Methacrylic acid 79-41-4 | Category I | | rabbit | Draize Test |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| Butyl hydroxytoluene 128-37-0 | slightly irritating | | rabbit | Draize Test |

**Respiratory or skin sensitization:**

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Methacrylic acid 79-41-4 | not sensitising | Buehler test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Butyl hydroxytoluene 128-37-0 | not sensitising | Draize Test | guinea pig | Draize Test |

**Germ cell mutagenicity:**

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | not specified |
| Methacrylic acid 79-41-4 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Methacrylic acid 79-41-4 | negative | inhalation | | mouse | OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | negative | oral: gavage | | mouse | not specified |
| Cumene hydroperoxide 80-15-9 | positive | bacterial reverse mutation assay (e.g Ames test) | without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Cumene hydroperoxide 80-15-9 | negative | dermal | | mouse | not specified |
| Butyl hydroxytoluene 128-37-0 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | not specified |
| | negative | in vitro mammalian chromosome aberration test | with and without | | not specified |
| | negative | mammalian cell gene mutation assay | with and without | | not specified |
| Butyl hydroxytoluene 128-37-0 | negative | oral: feed | | rat | not specified |

**Carcinogenicity:**

| Hazardous components CAS-No. | Result | Species | Sex | Exposure timeFrequency of treatment | Route of application | Method |
|---|---|---|---|---|---|---|
| Methacrylic acid 79-41-4 | not carcinogenic | mouse | male/female | 2 y | inhalation | OECD Guideline 451 (Carcinogenicity Studies) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | not carcinogenic | mouse | male | 2 y daily | dermal | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | not carcinogenic | rat | male/female | 2 y daily | oral: gavage | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Butyl hydroxytoluene 128-37-0 | | rat | male | 2 y daily | oral: feed | |

**Reproductive toxicity:**

| Hazardous substances CAS-No. | Result / Classification | Species | Exposure time | Species | Method |
|---|---|---|---|---|---|
| Methacrylic acid 79-41-4 | NOAEL P = 50 mg/kg<br>NOAEL F1 = 400 mg/kg<br>NOAEL F2 = 400 mg/kg | Two generation study oral: gavage | | rat | OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | NOAEL P = >= 50 mg/kg<br>NOAEL F1 = >= 750 mg/kg<br>NOAEL F2 = >= 750 mg/kg | Two generation study oral: gavage | 238 d | rat | OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) |
| Butyl hydroxytoluene 128-37-0 | NOAEL P = 500 mg/kg | Two generation study oral: feed | | rat | not specified |

**Repeated dose toxicity**

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | LOAEL=2000 ppm | inhalation | 14 weeks6 hrs/day, 5 days/wk | mouse | Dose Range Finding Study |
| Methyl methacrylate 80-62-6 | NOAEL=1000 ppm | inhalation | 14 weeks6 hrs/day, 5 days/wk | mouse | Dose Range Finding Study |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | NOAEL=50 mg/kg | oral: gavage | 14 wdaily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Cumene hydroperoxide 80-15-9 | | inhalation: aerosol | 6 h/d5 d/w | rat | not specified |
| Butyl hydroxytoluene 128-37-0 | NOAEL=25 mg/kg | oral: feed | daily | rat | not specified |

## SECTION 12: Ecological information

**General ecological 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.

**12.1. Toxicity**

**Ecotoxicity:**
Do not empty into drains / surface water / ground water.
Harmful to aquatic life with long lasting effects.

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | LC50 | 350 mg/l | Fish | | Leuciscus idus | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Methyl methacrylate 80-62-6 | EC50 | 69 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Methyl methacrylate 80-62-6 | EC50 | 170 mg/l | Algae | 4 d | Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | NOEC | 100 mg/l | Algae | 4 d | Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Methyl methacrylate 80-62-6 | EC0 | 100 mg/l | Bacteria | 30 min | | not specified |
| Methacrylic acid 79-41-4 | LC50 | 85 mg/l | Fish | 96 h | Salmo gairdneri (new name: Oncorhynchus mykiss) | EPA OTS 797.1400 (Fish Acute Toxicity Test) |
| Methacrylic acid 79-41-4 | EC50 | > 130 mg/l | Daphnia | 48 h | Daphnia magna | EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids) |
| Methacrylic acid 79-41-4 | NOEC | 8,2 mg/l | Algae | 72 h | Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | EC50 | 45 mg/l | Algae | 72 h | Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Methacrylic acid 79-41-4 | EC10 | 100 mg/l | Bacteria | 17 h | | not specified |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | LC50 | 32,5 mg/l | Fish | 48 h | | DIN 38412-15 |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | EC50 | 9,79 mg/l | Algae | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | NOEC | 2,11 mg/l | Algae | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | NOEC | 20 mg/l | Bacteria | 28 d | activated sludge, domestic | not specified |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | NOEC | 5,09 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | LC50 | 1,75 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | EC50 | 1,7 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | EC50 | > 11 mg/l | Algae | 72 h | Scenedesmus capricornutum | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | NOEC | 4,2 mg/l | Algae | 72 h | Scenedesmus capricornutum | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | IC50 | > 100 mg/l | Bacteria | 3 h | activated sludge, industrial | other guideline: |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | NOEC | 0,3 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Cumene hydroperoxide 80-15-9 | LC50 | 3,9 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Cumene hydroperoxide 80-15-9 | EC 50 | 7 mg/l | Daphnia | 24 h | Water flea (Daphnia magna) | |
| | EC50 | 18 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | 202 (Daphnia sp. Acute Immobilisation Test) |
| Cumene hydroperoxide 80-15-9 | ErC50 | 3,1 mg/l | Algae | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Cumene hydroperoxide 80-15-9 | EC10 | 70 mg/l | Bacteria | 30 min | | not specified |
| Butyl hydroxytoluene 128-37-0 | NOEC | 0,053 mg/l | Fish | 30 d | Oryzias latipes | OECD Guideline 210 (fish early lite stage toxicity test) |
| Butyl hydroxytoluene 128-37-0 | EC50 | 0,48 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Butyl hydroxytoluene 128-37-0 | EC10 | 0,4 mg/l | Algae | 72 h | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) | EU Method C.3 (Algal Inhibition test) |
| Butyl hydroxytoluene 128-37-0 | NOEC | 0,069 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| 1,1,2-Trichloroethane 79-00-5 | LC50 | 136 mg/l | Fish | 96 h | Pimephales promelas | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 1,1,2-Trichloroethane 79-00-5 | EC50 | 160 mg/l | Daphnia | 48 h | Daphnia magna | other guideline: |
| 1,1,2-Trichloroethane 79-00-5 | EC50 | 213 mg/l | Algae | 72 h | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |

**12.2. Persistence and degradability**

**Persistence and Biodegradability:**
The product is not biodegradable.

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | readily biodegradable | aerobic | 95 % | EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test) |
| Methacrylic acid 79-41-4 | inherently biodegradable | aerobic | 100 % | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test) |
| | readily biodegradable | aerobic | 86 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | readily biodegradable | aerobic | 84 % | OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | | aerobic | 5 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| Cumene hydroperoxide 80-15-9 | | no data | 0 % | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| Butyl hydroxytoluene 128-37-0 | not readily biodegradable. | aerobic | 4,5 % | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)) |
| | not inherently biodegradable | aerobic | 5,2 - 5,6 % | OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II)) |
| 1,1,2-Trichloroethane 79-00-5 | not readily biodegradable. | aerobic | 5 % | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)) |

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

**Mobility:**
Cured adhesives are immobile.

**Bioaccumulative potential:**
No data available.

| Hazardous components CAS-No. | LogPow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | 1,38 | | | | | not specified |
| Methacrylic acid 79-41-4 | 0,93 | | | | 22 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | 3,242 | | | | 25 °C | EU Method A.8 (Partition Coefficient) |
| Cumene hydroperoxide 80-15-9<br><br>Cumene hydroperoxide 80-15-9 | <br><br>2,16 | 9,1 | | calculation | | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)<br>not specified |
| Butyl hydroxytoluene 128-37-0<br><br>Butyl hydroxytoluene 128-37-0 | <br><br>5,1 | 330 - 1.800 | 56 d | Cyprinus carpio | | OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)<br>other guideline: |
| 1,1,2-Trichloroethane 79-00-5<br>1,1,2-Trichloroethane 79-00-5 | <br>> 2,05 - < 2,49 | 2 | 14 d | Lepomis macrochirus | <br>20 °C | other guideline:<br><br>QSAR (Quantitative Structure Activity Relationship) |

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

| Hazardous components CAS-No. | PBT/vPvB |
|---|---|
| Methyl methacrylate 80-62-6 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Methacrylic acid 79-41-4 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 1-Methyltrimethylene dimethacrylate 1189-08-8 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Epoxy resin (number average molecular weight ≤ 700) 25068-38-6 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Cumene hydroperoxide 80-15-9 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Butyl hydroxytoluene 128-37-0 | 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.
Do not empty into drains / surface water / ground water.

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 | 1133 |
| RID | 1133 |
| ADN | 1133 |
| IMDG | 1133 |
| IATA | 1133 |

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR | ADHESIVES |
| RID | ADHESIVES |
| ADN | ADHESIVES |
| IMDG | ADHESIVES |
| IATA | Adhesives |

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

| | |
|---|---|
| ADR | 3 |
| RID | 3 |
| ADN | 3 |
| IMDG | 3 |
| IATA | 3 |

**14.4. Packing group**

| | |
|---|---|
| ADR | II |
| RID | II |
| ADN | II |
| IMDG | II |
| IATA | II |

**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 | Special provision 640D<br>Tunnelcode: (D/E) |
| RID | Special provision 640D |
| ADN | Special provision 640D |
| 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 (2010/75/EC) | < 55 % |

**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.
H242 Heating may cause a fire.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

**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.**

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



SDS No. : 173210
V005.0

Loctite 3295B

Revision: 21.07.2016
printing date: 15.05.2018
Replaces version from: 04.02.2015

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

**1.1. Product identifier**
Loctite 3295B

**Contains:**
Methyl methacrylate
Diethylol-p-toluidine
Triphenylphosphine
2-Ethylhex-2-enal

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use:
Acrylic Adhesive

**1.3. Details of the supplier of the safety data sheet**
Henkel 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):**

| | |
|---|---|
| Flammable liquids | Category 2 |
| H225 Highly flammable liquid and vapor. | |
| Skin irritation | Category 2 |
| H315 Causes skin irritation. | |
| Serious eye damage | Category 1 |
| H318 Causes serious eye damage. | |
| 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 | |

**2.2. Label elements**

**Label elements (CLP):**

**Hazard pictogram:**

**Signal word:** Danger

**Hazard statement:**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

**Precautionary statement: Prevention**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours.
P280 Wear protective gloves/eye protection.

**Precautionary statement: Response**
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

**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:**
Part B of a two part 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 |
|---|---|---|---|
| Methyl methacrylate<br>80-62-6 | 201-297-1<br>01-2119452498-28 | 50- 100 % | Flam. Liq. 2<br>H225<br>STOT SE 3<br>H335<br>Skin Irrit. 2<br>H315<br>Skin Sens. 1<br>H317 |
| Diethyl-phenyl-propyl-dihydropyridine<br>34562-31-7 | 252-091-3 | 5- < 10 % | Acute Tox. 4; Oral<br>H302<br>Acute Tox. 4; Dermal<br>H312<br>Skin Irrit. 2; Dermal<br>H315<br>Eye Irrit. 2<br>H319<br>Aquatic Chronic 4<br>H413 |
| Diethylol-p-toluidine<br>3077-12-1 | 221-359-1 | 1- < 5 % | Acute Tox. 4; Oral<br>H302<br>Eye Dam. 1<br>H318 |
| Triphenylphosphine<br>603-35-0 | 210-036-0 | 0,1- < 1 % | Acute Tox. 4; Oral<br>H302<br>Skin Sens. 1; Dermal<br>H317<br>Aquatic Chronic 4<br>H413<br>STOT RE 2<br>H373 |
| 2-Ethylhex-2-enal<br>645-62-5 | 211-448-3 | 0,1- < 1 % | Flam. Liq. 3<br>H226<br>Skin Irrit. 2; Dermal<br>H315<br>Skin Sens. 1; Dermal<br>H317 |
| Benzochinon, p-<br>106-51-4 | 203-405-2<br>01-2119933861-35 | 0,01- < 0,1 % | Acute Tox. 3; Inhalation<br>H331<br>Acute Tox. 3; Oral<br>H301<br>Eye Irrit. 2<br>H319<br>STOT SE 3<br>H335<br>Skin Irrit. 2<br>H315<br>Aquatic Acute 1<br>H400<br>M factor (Acute Aquat Tox): 10 M factor (Chron 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. 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**
EYE: Irritation, conjunctivitis.

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

**4.3. Indication of any immediate medical attention and special treatment needed**
See section: Description of first aid measures

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**
**Suitable extinguishing media:**
Carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:**
None known

**5.2. Special hazards arising from the substance or mixture**
Oxides of carbon, oxides of nitrogen, irritating organic vapors.

**5.3. Advice for firefighters**
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**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.

**6.2. Environmental precautions**
Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up**
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

**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.
Avoid skin and eye contact.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.
Vapours should be extracted to avoid inhalation.

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**
For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)
Keep away from sources of ignition.

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

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Occupational Exposure Limits**

Valid for
Great Britain

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|---|---|---|---|---|
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | 416 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | 208 | Time Weighted Average (TWA): | | EH40 WEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 2 | Time Weighted Average (TWA): | | EH40 WEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 6 | Short Term Exposure Limit (STEL): | | EH40 WEL |

**Occupational Exposure Limits**

Valid for
Ireland

| Ingredient [Regulated substance] | ppm | mg/m³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|---|---|---|---|---|
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 50 | | Time Weighted Average (TWA): | Indicative OELV | IR_OEL |
| Methyl methacrylate<br>80-62-6<br>[METHYL METHACRYLATE] | 100 | | Short Term Exposure Limit (STEL): | Indicative OELV | IR_OEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 2 | Time Weighted Average (TWA): | | IR_OEL |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>[PARAFFIN WAX, FUME] | | 6 | Short Term Exposure Limit (STEL): | | IR_OEL |
| p-Benzoquinone<br>106-51-4<br>[QUINONE] | 0,3 | 1,2 | Short Term Exposure Limit (STEL): | | IR_OEL |
| p-Benzoquinone<br>106-51-4<br>[QUINONE] | 0,1 | 0,4 | 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 | |
| Methyl methacrylate 80-62-6 | aqua (freshwater) | | | | | 0,94 mg/L | |
| Methyl methacrylate 80-62-6 | aqua (marine water) | | | | | 0,94 mg/L | |
| Methyl methacrylate 80-62-6 | aqua (intermittent releases) | | | | | 0,94 mg/L | |
| Methyl methacrylate 80-62-6 | sewage treatment plant (STP) | | | | | 10 mg/L | |
| Methyl methacrylate 80-62-6 | sediment (freshwater) | | | | 5,74 mg/kg | | |
| Methyl methacrylate 80-62-6 | soil | | | | 1,47 mg/kg | | |

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

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | Workers | dermal | Acute/short term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | Workers | dermal | Long term exposure - systemic effects | | 13,67 mg/kg bw/day | |
| Methyl methacrylate 80-62-6 | Workers | Inhalation | Long term exposure - systemic effects | | 208 mg/m3 | |
| Methyl methacrylate 80-62-6 | Workers | dermal | Long term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | Workers | Inhalation | Long term exposure - local effects | | 208 mg/m3 | |
| Methyl methacrylate 80-62-6 | general population | dermal | Acute/short term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | general population | dermal | Long term exposure - systemic effects | | 8,2 mg/kg bw/day | |
| Methyl methacrylate 80-62-6 | general population | Inhalation | Long term exposure - systemic effects | | 74,3 mg/m3 | |
| Methyl methacrylate 80-62-6 | general population | dermal | Long term exposure - local effects | | 1,5 mg/cm2 | |
| Methyl methacrylate 80-62-6 | general population | Inhalation | Long term exposure - local effects | | 105 mg/m3 | |

**Biological Exposure Indices:**
None

**8.2. Exposure controls:**

Engineering controls:
Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

Respiratory protection:
Use only in well-ventilated areas.
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 > 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:
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 | liquid<br>blue |
| Odor | mild |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Initial boiling point | > 75 °C (> 167 °F) |
| Flash point | < 21 °C (< 69.8 °F) |
| Decomposition temperature | No data available / Not applicable |
| Vapour pressure | < 53 mbar |
| Density<br>() | 1,05 g/cm3 |
| 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)<br>(Solvent: Water) | Not miscible |
| 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 | |
| lower | 2,1 %(V) |
| upper | 12,5 %(V) |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Evaporation rate | No data available / Not applicable |

| | |
|---|---|
| Vapor density | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

**9.2. Other information**

No data available / Not applicable

## SECTION 10: Stability and reactivity

**10.1. Reactivity**
Reaction with strong 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**
Stable

**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:**
May cause irritation to the digestive tract.

**Skin irritation:**
Causes skin irritation.

**Eye irritation:**
Causes serious eye damage.

**Sensitizing:**
May cause an allergic skin reaction.

**Acute oral toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Diethylol-p-toluidine<br>3077-12-1 | LD50 | 960 mg/kg | oral | | rat | |
| Triphenylphosphine<br>603-35-0 | LD50 | 700 mg/kg | oral | | rat | BASF Test |
| 2-Ethylhex-2-enal<br>645-62-5 | LD50 | 4.675 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| Benzochinon, p-<br>106-51-4 | LD50 | 130 mg/kg | oral | | rat | |

**Acute inhalative toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Triphenylphosphine<br>603-35-0 | LC50 | 12,5 mg/l | aerosol | 4 h | rat | |
| 2-Ethylhex-2-enal<br>645-62-5 | Acute toxicity estimate (ATE) | 20,1 mg/l | aerosol | | | Expert judgement |
| 2-Ethylhex-2-enal<br>645-62-5 | LCLo | 4 mg/l | Vapor. | | rat | BASF Test |

**Acute dermal toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Triphenylphosphine<br>603-35-0 | LD50 | > 4.000 mg/kg | dermal | | rabbit | BASF Test |
| Benzochinon, p-<br>106-51-4 | LD50 | > 2.000 mg/kg | dermal | | rat | |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Diethyl-phenyl-propyl-dihydropyridine<br>34562-31-7 | irritating | | | expert judgment |
| Triphenylphosphine<br>603-35-0 | not irritating | 20 h | rabbit | BASF Test |
| 2-Ethylhex-2-enal<br>645-62-5 | irritating | 20 h | rabbit | BASF Test |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Diethyl-phenyl-propyl-dihydropyridine<br>34562-31-7 | irritating | | | expert judgment |
| Triphenylphosphine<br>603-35-0 | not irritating | 24 h | rabbit | BASF Test |
| 2-Ethylhex-2-enal<br>645-62-5 | not irritating | | rabbit | BASF Test |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No. | Result | Test type | Species | Method |
|---|---|---|---|---|
| Methyl methacrylate<br>80-62-6 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Triphenylphosphine<br>603-35-0 | sensitising | Guinea pig maximisation test | guinea pig | EU Method B.6 (Skin Sensitisation) |
| 2-Ethylhex-2-enal<br>645-62-5 | sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |

**Germ cell mutagenicity:**

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | |
| Triphenylphosphine 603-35-0 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | |
| 2-Ethylhex-2-enal 645-62-5 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |

**Repeated dose toxicity**

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | LOAEL=2000 ppm | inhalation | 14 weeks6 hrs/day, 5 days/wk | mouse | Dose Range Finding Study |
| Methyl methacrylate 80-62-6 | NOAEL=1000 ppm | inhalation | 14 weeks6 hrs/day, 5 days/wk | mouse | Dose Range Finding Study |
| Triphenylphosphine 603-35-0 | NOAEL=6 mg/kg | oral: gavage | 91 days7 days/week | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

## SECTION 12: Ecological information

**General ecological 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.

**12.1. Toxicity**

**Ecotoxicity:**
Do not empty into drains / surface water / ground water.

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | LC50 | 350 mg/l | Fish | | Leuciscus idus | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Methyl methacrylate 80-62-6 | EC50 | 69 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Methyl methacrylate 80-62-6 | EC50 | 170 mg/l | Algae | 4 d | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | NOEC | 100 mg/l | Algae | 4 d | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Methyl methacrylate 80-62-6 | EC0 | 100 mg/l | Bacteria | 30 min | | |
| Diethylol-p-toluidine 3077-12-1 | LC50 | > 100 mg/l | Fish | 96 h | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 2-Ethylhex-2-enal 645-62-5 | LC50 | 10 - 22 mg/l | Fish | 96 h | Leuciscus idus | DIN 38412-15 |
| 2-Ethylhex-2-enal 645-62-5 | EC50 | 20 mg/l | Daphnia | 48 h | Daphnia magna | EU Method C.2 (Acute Toxicity for Daphnia) |
| 2-Ethylhex-2-enal 645-62-5 | EC10 | 6,6 mg/l | Algae | 72 h | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) | |
| | EC50 | 27,7 mg/l | Algae | 72 h | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) | |
| 2-Ethylhex-2-enal 645-62-5 | EC10 | 159 mg/l | Bacteria | 6 h | | |
| Benzochinon, p- 106-51-4 | LC50 | < 1 mg/l | Fish | | | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Benzochinon, p- 106-51-4 | EC50 | < 1 mg/l | Daphnia | | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Benzochinon, p- 106-51-4 | EC50 | 6 mg/l | Algae | | Scenedesmus sp. | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Benzochinon, p- 106-51-4 | EC0 | < 1 mg/l | Bacteria | 30 min | | |

**12.2. Persistence and degradability**

**Persistence and Biodegradability:**
The product is not biodegradable.

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

| | | | | |
|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | readily biodegradable | aerobic | 95 % | EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test) |
| Diethylol-p-toluidine 3077-12-1 | | | > 48 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| Triphenylphosphine 603-35-0 | Not readily biodegradable. | aerobic | < 20 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| 2-Ethylhex-2-enal 645-62-5 | readily biodegradable | aerobic | 75 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| Benzochinon, p- 106-51-4 | | aerobic | 23 - 61 % | EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test) |

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

**Mobility:**
Cured adhesives are immobile.

**Bioaccumulative potential:**
No data available.

| Hazardous components CAS-No. | LogKow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|---|---|---|---|---|---|
| Methyl methacrylate 80-62-6 | 1,38 | | | | | |
| Triphenylphosphine 603-35-0 | 5,69 | | | | | OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow-Stirring Method) |
| 2-Ethylhex-2-enal 645-62-5 | 2,38 | | | | 23 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Benzochinon, p- 106-51-4 | 0,2 | | | | | |

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

| Hazardous components CAS-No. | PBT/vPvB |
|---|---|
| Methyl methacrylate 80-62-6 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Diethylol-p-toluidine 3077-12-1 | Not fulfilling PBT (persistent/bioaccummulative/toxic) criteria |
| Triphenylphosphine 603-35-0 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Benzochinon, p- 106-51-4 | 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.

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

## SECTION 14: Transport information

**14.1. UN number**

| | |
|---|---|
| ADR | 1133 |
| RID | 1133 |
| ADN | 1133 |

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR | ADHESIVES |
| RID | ADHESIVES |
| ADN | ADHESIVES |

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

| | |
|---|---|
| ADR | 3 |
| RID | 3 |
| ADN | 3 |

**14.4. Packing group**

| | |
|---|---|
| ADR | II |
| RID | II |
| ADN | II |

**14.1. UN number**

| | |
|---|---|
| ADR | 1133 |
| RID | 1133 |
| ADN | 1133 |
| IMDG | 1133 |
| IATA | 1133 |

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR | ADHESIVES |
| RID | ADHESIVES |
| ADN | ADHESIVES |
| IMDG | ADHESIVES |
| IATA | Adhesives |

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

| | |
|---|---|
| ADR | 3 |
| RID | 3 |
| ADN | 3 |
| IMDG | 3 |
| IATA | 3 |

**14.4. Packing group**

| | |
|---|---|
| ADR | II |
| RID | II |
| ADN | II |
| IMDG | II |
| IATA | II |

**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 | Special provision 640D |
| | Tunnelcode: (D/E) |
| | Tunnelcode: (D/E) |
| RID | Special provision 640D |
| ADN | Special provision 640D |
| 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 (2010/75/EC) < 60 %

**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.
H226 Flammable liquid and vapor.
H301 Toxic if swallowed.
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.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
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.

**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.**