



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

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LOCTITE® 5452™ THREAD SEALANT

SDS No.: 567952

V002.0

Revision: 21.09.2021

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Replaces version from: 14.12.2016

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

1.1. Product identifier

LOCTITE® 5452™ THREAD SEALANT

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

Intended use:

Sample only.

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

Fax-no.: +44 (1442) 278071

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.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):

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:



Contains

Cumene hydroperoxide

Signal word: Warning

Hazard statement: H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Supplemental information Contains: Diethylol-p-toluidine; 4-Morpholinecarboxaldehyde **May produce an allergic reaction.**

Precautionary statement: P261 Avoid breathing vapors.
Prevention

Precautionary statement: P337+P313 If eye irritation persists: Get medical advice/attention.
Response

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:
Acrylate adhesive

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

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|---|-------------------------------|---------------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | 609-946-4 01-2119980659-17 | 10- 20 % | Aquatic Chronic 4 H413 |
| Cumene hydroperoxide 80-15-9 | 201-254-7 01-2119475796-19 | 0,25- < 2,5 % | STOT RE 2 H373 Skin Corr. 1B H314 Acute Tox. 2; Inhalation H330 Aquatic Chronic 2 H411 Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Org. Perox. E H242 STOT SE 3 H335 |
| Diethylol-p-toluidine 3077-12-1 | 221-359-1 01-2120791684-40 | 0,1- < 1 % | Skin Sens. 1 H317 Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Aquatic Chronic 3 H412 |
| 4-Morpholinecarboxaldehyde 4394-85-8 | 224-518-3 01-2119987993-12 | 0,1- < 1 % | Skin Sens. 1B H317 |

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.

Prolonged or repeated contact may cause skin irritation.

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:

water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

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 (NO_x) 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.

Wear protective equipment.

Ensure adequate ventilation.

Keep away from sources of ignition.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

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

Avoid skin and eye contact.
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

Store in sealed original container.

Store in a cool, dry place.

7.3. Specific end use(s)

Sample only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|--|-----|-------------------|------------------------------|--|-----------------|
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST] | | 6 | Time Weighted Average (TWA): | | EH40 WEL |
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST] | | 2,4 | Time Weighted Average (TWA): | | EH40 WEL |
| Silicon dioxide 112945-52-5 [Dust, respirable dust] | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| Silicon dioxide 112945-52-5 [Dust, inhalable dust] | | 10 | Time Weighted Average (TWA): | | EH40 WEL |

Occupational Exposure Limits

Valid for
Ireland

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------------------|------------------------------|--|-----------------|
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS] | | 6 | Time Weighted Average (TWA): | | IR_OEL |
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS] | | 2,4 | Time Weighted Average (TWA): | | IR_OEL |
| Silicon dioxide 112945-52-5 [DUST NON-SPECIFIC] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Silicon dioxide 112945-52-5 [DUST NON-SPECIFIC] | | 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 | |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | aqua (freshwater) | | | | | | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | aqua (marine water) | | | | | | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | sewage treatment plant (STP) | | | | | | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | sediment (freshwater) | | | | | | |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | sediment (marine water) | | | | | | |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | Air | | | | | | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | soil | | | | | | |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | Predator | | | | | | |
| .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 | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | aqua (freshwater) | | 0,026 mg/l | | | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | aqua (intermittent releases) | | 0,26 mg/l | | | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | aqua (marine water) | | 0,003 mg/l | | | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | sediment (freshwater) | | | | 0,121 mg/kg | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | sediment (marine water) | | | | 0,012 mg/kg | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | Sewage treatment plant | | 10 mg/l | | | | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | Soil | | | | 0,009 mg/kg | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | aqua (freshwater) | | 0,5 mg/l | | | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | aqua (marine water) | | 0,05 mg/l | | | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | aqua (intermittent releases) | | 5 mg/l | | | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | sewage treatment plant (STP) | | 2000 mg/l | | | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | sediment (freshwater) | | | | 1,85 mg/kg | | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | sediment (marine water) | | | | 0,0764 mg/kg | | |

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|---|--------------------|-------------------|---------------------------------------|---------------|--------------|----------------------|
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | Workers | inhalation | Long term exposure - systemic effects | | 3,52 mg/m3 | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | Workers | dermal | Long term exposure - systemic effects | | 2 mg/kg | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | General population | inhalation | Long term exposure - systemic effects | | 0,87 mg/m3 | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | General population | dermal | Long term exposure - systemic effects | | 1 mg/kg | no hazard identified |
| Bisphenol A, 2-EO dimethacrylate 41637-38-1 | General population | oral | Long term exposure - systemic effects | | 0,5 mg/kg | no hazard identified |
| .alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9 | Workers | inhalation | Long term exposure - systemic effects | | 6 mg/m3 | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | Workers | inhalation | Long term exposure - systemic effects | | 3,29 mg/m3 | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | Workers | dermal | Long term exposure - systemic effects | | 0,47 mg/kg | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | General population | inhalation | Long term exposure - systemic effects | | 0,58 mg/m3 | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | General population | dermal | Long term exposure - systemic effects | | 0,17 mg/kg | |
| 2,2'-[(4-Methylphenyl)imino]bisethanol 3077-12-1 | General population | oral | Long term exposure - systemic effects | | 0,16 mg/kg | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | Workers | dermal | Long term exposure - local effects | | 0,293 mg/cm2 | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | Workers | inhalation | Long term exposure - systemic effects | | 98 mg/m3 | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | General population | dermal | Long term exposure - systemic effects | | 8 mg/kg | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | General population | inhalation | Long term exposure - systemic effects | | 29 mg/m3 | |
| 4-Morpholinecarboxaldehyde 4394-85-8 | General population | oral | Long term exposure - systemic effects | | 8 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:

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

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.

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

Advices to personal protection equipment:

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

Personal protective equipment should conform to the relevant EN standard.

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

| | |
|--|---|
| Appearance | liquid liquid purple |
| Odor | mild |
| Odour threshold | No data available / Not applicable |
| pH | Not available. |
| Melting point | No data available / Not applicable |
| Solidification temperature | No data available / Not applicable |
| Initial boiling point | No data available / Not applicable |
| Flash point | > 93 °C (> 199.4 °F); ASTM D3278 Setaflash Closed Cup |
| Evaporation rate | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Explosive limits | No data available / Not applicable |
| Vapour pressure | No data available / Not applicable |
| Relative vapour density: | No data available / Not applicable |
| Density (ρ) | 1,15 g/cm ³ |
| Bulk density | No data available / Not applicable |
| Solubility | No data available / Not applicable |
| Solubility (qualitative) | No data available / Not applicable |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Auto-ignition temperature | No data available / Not applicable |
| Decomposition temperature | No data available / Not applicable |
| Viscosity | No data available / Not applicable |
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.

Acids.

Reducing agents.

Strong bases.

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.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

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

| Hazardous substances CAS-No. | Value type | Value | Species | Method |
|--|---------------|---------------|---------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | LD50 | > 2.000 mg/kg | rat | OECD Guideline 423 (Acute Oral toxicity) |
| Cumene hydroperoxide 80-15-9 | LD50 | 382 mg/kg | rat | other guideline: |
| Diethylol-p-toluidine 3077-12-1 | LD50 | 959 mg/kg | rat | equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | LD50 | > 7.360 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |

Acute dermal toxicity:

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

| Hazardous substances CAS-No. | Value type | Value | Species | Method |
|---|-------------------------------|-------------------|---------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | LD50 | > 2.000 mg/kg | rat | OECD Guideline 402 (Acute Dermal Toxicity) |
| Cumene hydroperoxide 80-15-9 | LD50 | 530 - 1.060 mg/kg | rat | other guideline: |
| Cumene hydroperoxide 80-15-9 | Acute toxicity estimate (ATE) | 1.100 mg/kg | | Expert judgement |
| Diethylol-p-toluidine 3077-12-1 | LD50 | > 2.000 mg/kg | rat | OECD Guideline 402 (Acute Dermal Toxicity) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | LD50 | > 18.400 mg/kg | rabbit | OECD Guideline 402 (Acute Dermal Toxicity) |

Acute inhalative toxicity:

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

| Hazardous substances CAS-No. | Value type | Value | Test atmosphere | Exposure time | Species | Method |
|---------------------------------|---------------|------------|-----------------|------------------|---------|---------------|
| Cumene hydroperoxide 80-15-9 | LC50 | 1,370 mg/l | vapour | 4 h | rat | not specified |

Skin corrosion/irritation:

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

| Hazardous substances CAS-No. | Result | Exposure time | Species | Method |
|---|----------------|------------------|---|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | not irritating | 15 min | Human, EpiSkin™ (SM), Reconstructed Human Epidermis (RHE) | OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method) |
| Cumene hydroperoxide 80-15-9 | corrosive | | rabbit | Draize Test |
| Diethylol-p-toluidine 3077-12-1 | not irritating | 24 h | rabbit | not specified |

Serious eye damage/irritation:

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

| Hazardous substances CAS-No. | Result | Exposure time | Species | Method |
|---|--|------------------|-------------------------------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | not irritating | | Bovine, cornea, in vitro test | OECD Guideline 437 (BCOP) |
| Diethylol-p-toluidine 3077-12-1 | Category 1 (irreversible effects on the eye) | | rabbit | equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

Respiratory or skin sensitization:

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

| Hazardous substances CAS-No. | Result | Test type | Species | Method |
|---|-----------------|------------------------------------|---------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | not sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Diethylol-p-toluidine 3077-12-1 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |

Germ cell mutagenicity:

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

| Hazardous substances CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|----------|--|--|---------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | negative | in vitro mammalian cell micronucleus test | with and without | | OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test) |
| Cumene hydroperoxide 80-15-9 | positive | bacterial reverse mutation assay (e.g Ames test) | without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |

Carcinogenicity

No data available.

Reproductive toxicity:

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

| Hazardous substances CAS-No. | Result / Value | Test type | Route of application | Species | Method |
|---|---|-----------|-------------------------|---------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | NOAEL P 1.000 mg/kg NOAEL F1 1.000 mg/kg | screening | oral: gavage | rat | OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test) |

STOT-single exposure:

No data available.

STOT-repeated exposure::

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

| Hazardous substances CAS-No. | Result / Value | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|-------------------|-------------------------|--|---------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | NOAEL 1.000 mg/kg | oral: gavage | 13 weeks daily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Cumene hydroperoxide 80-15-9 | | inhalation: aerosol | 6 h/d 5 d/w | rat | not specified |

Aspiration hazard:

No data available.

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

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

12.1. Toxicity**Toxicity (Fish):**

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|--|------------|-----------------------------|---------------|---------------------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | LL50 | Toxicity > Water solubility | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Cumene hydroperoxide 80-15-9 | LC50 | 3,9 mg/l | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Diethylol-p-toluidine 3077-12-1 | LC50 | > 100 mg/l | 96 h | Cyprinus carpio | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | LC50 | > 500 mg/l | 96 h | Leuciscus idus | DIN 38412-15 |

Toxicity (Daphnia):

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|--|------------|-----------------------------|---------------|---------------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | EL50 | Toxicity > Water solubility | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Cumene hydroperoxide 80-15-9 | EC50 | 18,84 mg/l | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Diethylol-p-toluidine 3077-12-1 | EC50 | 48 mg/l | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | EC50 | > 500 mg/l | 48 h | Daphnia magna | EU Method C.2 (Acute Toxicity for Daphnia) |

Chronic toxicity to aquatic invertebrates

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|--|------------|-----------------------------|---------------|---------------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | NOEC | Toxicity > Water solubility | 48 day | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |

Toxicity (Algae):

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|--|---------------|-----------------------------|---------------|---|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | EL50 | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | EL10 | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Cumene hydroperoxide 80-15-9 | EC50 | 3,1 mg/l | 72 h | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Cumene hydroperoxide 80-15-9 | NOEC | 1 mg/l | 72 h | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Diethylol-p-toluidine 3077-12-1 | EC50 | > 100 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Diethylol-p-toluidine 3077-12-1 | NOEC | 100 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | EC50 | 23.880 mg/l | 72 h | Desmodesmus subspicatus | DIN 38412-09 |
| 4-Morpholinecarboxaldehyde 4394-85-8 | EC10 | 17.040 mg/l | 72 h | Desmodesmus subspicatus | DIN 38412-09 |

Toxicity to microorganisms

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

| Hazardous substances CAS-No. | Value type | Value | Exposure time | Species | Method |
|--|---------------|-----------------------------|---------------|---|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | EC50 | Toxicity > Water solubility | 3 h | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Cumene hydroperoxide 80-15-9 | EC10 | 70 mg/l | 30 min | | not specified |
| Diethylol-p-toluidine 3077-12-1 | EC50 | > 1.000 mg/l | 3 h | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

12.2. Persistence and degradability

| Hazardous substances CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|--|----------------------------|-----------|---------------|---------------|--|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | not readily biodegradable. | aerobic | 24 % | 28 d | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| Cumene hydroperoxide 80-15-9 | not readily biodegradable. | aerobic | 3 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| Diethylol-p-toluidine 3077-12-1 | not readily biodegradable. | aerobic | 1,5 % | 29 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | readily biodegradable | aerobic | 100 % | 28 day | OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test) |

12.3. Bioaccumulative potential

| Hazardous substances CAS-No. | Bioconcentration factor (BCF) | Exposure time | Temperature | Species | Method |
|--------------------------------------|-------------------------------|---------------|-------------|-----------------|---|
| Cumene hydroperoxide 80-15-9 | 9,1 | | | calculation | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |
| 4-Morpholinecarboxaldehyde 4394-85-8 | < 1,90 | 56 day | | Cyprinus carpio | OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish) |

12.4. Mobility in soil

| Hazardous substances CAS-No. | LogPow | Temperature | Method |
|---|------------|-------------|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | 5,3 - 5,62 | | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Cumene hydroperoxide 80-15-9 | 1,6 | 25 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Diethylol-p-toluidine 3077-12-1 | 2 | 35 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |

12.5. Results of PBT and vPvB assessment

| Hazardous substances CAS-No. | PBT/ vPvB |
|---|---|
| Ethoxylated bisphenol A dimethacrylate esters 41637-38-1 | 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. |
| Diethylol-p-toluidine 3077-12-1 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 4-Morpholinecarboxaldehyde 4394-85-8 | 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:

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

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

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

Waste code

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

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

SECTION 14: Transport information

14.1. UN number

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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

14.5. Environmental hazards

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

14.6. Special precautions for user

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

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

not applicable

SECTION 15: Regulatory information

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

| | |
|---|----------------|
| Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): | Not applicable |
| Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): | Not applicable |
| Persistent organic pollutants (Regulation (EU) 2019/1021): | Not applicable |
| VOC content (2010/75/EC) | < 3 % |

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H242 Heating may cause a fire.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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

Dear Customer,

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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.