

LOCTITE 574

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

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SDS No.: 153497 V007.1

Revision: 17.10.2016

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Replaces version from: 06.06.2016

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

1.1. Product identifier

LOCTITE 574

Contains:

Maleic acid

Acetic acid, 2-phenylhydrazide

N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

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

Intended use:

Anaerobic Sealant

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@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

$\textbf{Classification} \ (\textbf{CLP}) \textbf{:}$

Skin sensitizer

Category 1

H317 May cause an allergic skin reaction.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Warning

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Hazard statement: H317 May cause an allergic skin reaction.

Precautionary statement: ***For consumer use only: P101 If medical advice is needed, have product container or

label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in

accordance with local authority requirements***

Precautionary statement:

Prevention

P280 Wear protective gloves.

Precautionary statement:

Response

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

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

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|--|-------------------------------|--------------|---|
| Decan-1-ol 112-30-1 | 203-956-9 01-2119480407-35 | 5-< 10 % | Eye Irrit. 2 H319 Aquatic Chronic 3 H412 |
| Cumene hydroperoxide 80-15-9 | 201-254-7 | 0,1-< 1 % | Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314 |
| Acetic acid, 2-phenylhydrazide 114-83-0 | 204-055-3 | 0,1-< 1 % | Acute Tox. 3; Oral |
| Maleic acid 110-16-7 | 203-742-5 01-2119488705-25 | 0,1-< 1 % | Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 STOT SE 3 H335 |
| 1,4-Naphthalenedione 130-15-4 | 204-977-6 | 0,01-< 0,1 % | Acute Tox. 3; Oral H301 Skin Irrit. 2; Dermal H315 Skin Sens. 1; Dermal H317 Eye Irrit. 2 H319 Acute Tox. 1; Inhalation H330 STOT SE 3; Inhalation H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M factor (Acute Aquat Tox): 10 M factor |
| N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2 | 204-613-6 01-2119978265-26 | 0,1-< 1 % | (Chron Aquat Tox): 10 Skin Sens. 1B H317 Aquatic Chronic 4 H413 |

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.

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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.

Eve contact

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

Ingestion:

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

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

SKIN: Rash, Urticaria.

Prolonged or repeated contact may cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

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

Do not expose to direct heat.

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

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Wear protective equipment.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

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

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7.1. Precautions for safe handling

Use only in well-ventilated areas. Avoid skin and eye contact. See advice in section 8

Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers at $8-21^{\circ}$ C ($46.4-69.8^{\circ}$ F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

7.3. Specific end use(s)

Anaerobic Sealant

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 | Regulatory list |
|----------------------------------|-----|-------------------|-----------------------|---------------------------|-----------------|
| | | | | category / Remarks | |
| Ethene, homopolymer | | 10 | Time Weighted Average | | EH40 WEL |
| 9002-88-4 | | | (TWA): | | |
| [DUST, INHALABLE DUST] | | | | | |
| Ethene, homopolymer | | 4 | Time Weighted Average | | EH40 WEL |
| 9002-88-4 | | | (TWA): | | |
| [DUST, RESPIRABLE DUST] | | | | | |
| Silicon dioxide | | 6 | Time Weighted Average | | EH40 WEL |
| 112945-52-5 | | | (TWA): | | |
| [SILICA, AMORPHOUS, INHALABLE | | | | | |
| DUST] | | | | | |
| Silicon dioxide | | 2,4 | Time Weighted Average | | EH40 WEL |
| 112945-52-5 | | | (TWA): | | |
| [SILICA, AMORPHOUS, RESPIRABLE | | | | | |
| DUST] | | | | | |

Occupational Exposure Limits

Valid for

Ireland

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|--|-----|-------------------|------------------------------|--|-----------------|
| Ethene, homopolymer 9002-88-4 [DUSTS, NON-SPECIFIC, RESPIRABLE] | | 4 | Time Weighted Average (TWA): | | IR_OEL |
| Ethene, homopolymer 9002-88-4 [DUSTS, NON-SPECIFIC, TOTAL INHALABLE] | | 10 | Time Weighted Average (TWA): | | IR_OEL |
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST] | | 6 | Time Weighted Average (TWA): | | IR_OEL |
| Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST] | | 2,4 | Time Weighted Average (TWA): | | IR_OEL |

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$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

| Name on list | Environmental Compartment | Exposure period | Value | Value | | | Remarks |
|------------------------------|------------------------------|-----------------|-------|-------|------------|--------------|---------|
| | | F | mg/l | ppm | mg/kg | others | |
| Decan-1-ol | aqua | | | ** | 0 0 | 0,022 mg/L | |
| 112-30-1 | (freshwater) | | | | | | |
| Decan-1-ol | sediment | | | | 0,13 mg/kg | | |
| 112-30-1 | (freshwater) | | | | | | |
| Decan-1-ol | aqua (marine | | | | | 0,0022 mg/L | |
| 112-30-1 | water) | | | | | | |
| Decan-1-ol | sediment | | | | 0,013 | | |
| 112-30-1 | (marine water) | | | | mg/kg | | |
| Decan-1-ol | soil | | | | 0,13 mg/kg | | |
| 112-30-1 | | | | | | | |
| Decan-1-ol | sewage | | | | | 0,4 mg/L | |
| 112-30-1 | treatment plant (STP) | | | | | | |
| .alpha.,.alphaDimethylbenzyl | aqua | | | | | 0,0031 mg/L | |
| hydroperoxide 80-15-9 | (freshwater) | | | | | | |
| .alpha.,.alphaDimethylbenzyl | aqua (marine | | | | | 0,00031 mg/L | |
| hydroperoxide | water) | | | | | 0,00031 mg/L | |
| 80-15-9 | , | | | | | | |
| .alpha.,.alphaDimethylbenzyl | aqua | | | | | 0,031 mg/L | |
| hydroperoxide | (intermittent | | | | | 3 | |
| 80-15-9 | releases) | | | | | | |
| .alpha.,.alphaDimethylbenzyl | Sewage | | | | | 0,35 mg/L | |
| hydroperoxide | treatment plant | | | | | | |
| 80-15-9 | | | | | | | |
| .alpha.,.alphaDimethylbenzyl | sediment | | | | 0,023 | | |
| hydroperoxide | (freshwater) | | | | mg/kg | | |
| 80-15-9 | | | | | | | |
| .alpha.,.alphaDimethylbenzyl | sediment | | | | 0,0023 | | |
| hydroperoxide 80-15-9 | (marine water) | | | | mg/kg | | |
| .alpha.,.alphaDimethylbenzyl | soil | | | | 0,0029 | | |
| hydroperoxide | | | | | mg/kg | | |
| 80-15-9 | | | | | | | |
| Maleic acid | aqua | | | | | 0,1 mg/L | |
| 110-16-7 | (freshwater) | | | | | | |
| Maleic acid | aqua | | | | | 0,4281 mg/L | |
| 110-16-7 | (intermittent | | | | | | |
| 26.1 | releases) | | | | 0.224 | | |
| Maleic acid | sediment | | | | 0,334 | | |
| 110-16-7 | (freshwater) | | 1 | | mg/kg | 14.6/I | |
| Maleic acid 110-16-7 | sewage treatment plant | | | | | 44,6 mg/L | |
| 110-10-7 | (STP) | | | | | | |
| Maleic acid | aqua (marine | | | | | 0,01 mg/L | |
| 110-16-7 | water) | | | | | | |
| Maleic acid | sediment | | | | 0,0334 | _ | |
| 110-16-7 | (marine water) | | | | mg/kg | | |
| Maleic acid | soil | | | | 0,0415 | | |
| 110-16-7 | | | | | mg/kg | | |

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Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|--|---------------------|----------------------|--|------------------|-------------------|---------|
| Decan-1-ol 112-30-1 | Workers | inhalation | Long term exposure - systemic effects | | 176 mg/m3 | |
| Decan-1-ol 112-30-1 | Workers | inhalation | Long term exposure - local effects | | 129 mg/m3 | |
| Decan-1-ol 112-30-1 | Workers | dermal | Long term exposure - systemic effects | | 250 mg/kg bw/day | |
| Decan-1-ol 112-30-1 | Workers | dermal | Long term exposure - local effects | | 190 μg/cm2 | |
| Decan-1-ol 112-30-1 | General population | inhalation | Long term exposure - systemic effects | | 43,5 mg/m3 | |
| Decan-1-ol 112-30-1 | General population | dermal | Long term exposure - systemic effects | | 125 mg/kg bw/day | |
| Decan-1-ol 112-30-1 | General population | dermal | Long term exposure - local effects | | 67 μg/cm2 | |
| Decan-1-ol 112-30-1 | General population | oral | Long term exposure - systemic effects | | 12,5 mg/kg bw/day | |
| .alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9 | Workers | inhalation | Long term exposure - systemic effects | | 6 mg/m3 | |
| Maleic acid 110-16-7 | Workers | dermal | Acute/short term exposure - local effects | | 0,55 mg/cm2 | |
| Maleic acid 110-16-7 | Workers | dermal | Long term exposure - local effects | | 0,04 mg/cm2 | |
| Maleic acid 110-16-7 | Workers | dermal | Acute/short term exposure - systemic effects | | 58 mg/kg bw/day | |
| Maleic acid 110-16-7 | Workers | dermal | Long term exposure - systemic effects | | 3,3 mg/kg bw/day | |
| Maleic acid 110-16-7 | Workers | inhalation | Acute/short term exposure - local effects | | 3 mg/m3 | |
| Maleic acid 110-16-7 | Workers | inhalation | Long term exposure - systemic effects | | 3 mg/m3 | |
| Maleic acid 110-16-7 | Workers | inhalation | Long term exposure - local effects | | 3 mg/m3 | |
| Maleic acid 110-16-7 | Workers | inhalation | Acute/short term exposure - systemic effects | | 3 mg/m3 | |

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls: Ensure good ventilation/extraction.

Respiratory protection: Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A (EN 14387)

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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 paste orange
Odor mild

Odour threshold No data available / Not applicable

pH Not applicable Initial boiling point > 150 °C (> 302 °F) Flash point > 93,3 °C (> 199.94 °F)

Decomposition temperature No data available / Not applicable

Vapour pressure 6,6700000 mbar

 $(27,0~^{\circ}\text{C}~(80.6~^{\circ}\text{F}))$

Vapour pressure < 300 mbar

(50 °C (122 °F))

Density 1,15 g/cm³

0

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) Slight

(Solvent: Water)

Solidification temperature

Mo data available / Not applicable
Melting point

No data available / Not applicable
Flammability

No data available / Not applicable
Auto-ignition temperature

Auto-ignition temperature

Explosive limits

No data available / Not applicable
Partition coefficient: n-octanol/water

No data available / Not applicable
No data available / Not applicable

Evaporation rate Not applicable

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

9.2. Other information

Ignition temperature Not available.

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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

Irritating organic vapours.

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.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Prolonged or repeated contact may cause eye irritation.

Sensitizing

May cause an allergic skin reaction.

Acute oral toxicity:

| Hazardous components | Value | Value | Route of | Exposure | Species | Method |
|----------------------|-------|---------------|-------------|----------|---------|---------------------------|
| CAS-No. | type | | application | time | | |
| Decan-1-ol | LD50 | > 5.000 mg/kg | oral | | rat | EPA OPPTS 870.1100 (Acute |
| 112-30-1 | | | | | | Oral Toxicity) |
| Cumene hydroperoxide | LD50 | 550 mg/kg | oral | | rat | not specified |
| 80-15-9 | | | | | | |
| Maleic acid | LD50 | 708 mg/kg | oral | | rat | not specified |
| 110-16-7 | | | | | | |
| 1,4-Naphthalenedione | LD50 | 190 mg/kg | oral | | rat | not specified |
| 130-15-4 | | | | | | |
| N,N'-Ethane-1,2- | LD50 | > 2.000 mg/kg | oral | | | |
| diylbis(12- | | | | | | |
| hydroxyoctadecan-1- | | | | | | |
| amide) | | | | | | |
| 123-26-2 | | | | | | |

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Acute inhalative toxicity:

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

Acute dermal toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|------------------------------|---------------|---------------|----------------------|---------------|---------|---------------------------|
| Decan-1-ol | LD50 | > 5.000 mg/kg | dermal | | rat | EPA OPPTS 870.1200 (Acute |
| 112-30-1 | | | | | | Dermal Toxicity) |
| Cumene hydroperoxide | LD50 | 1.200 - 1.520 | dermal | | | not specified |
| 80-15-9 | | mg/kg | | | | |
| Maleic acid | LD50 | 1.560 mg/kg | dermal | | rabbit | not specified |
| 110-16-7 | | | | | | |

Skin corrosion/irritation:

| Hazardous components | Result | Exposure | Species | Method |
|------------------------------|----------------|----------|---------|---------------------------|
| CAS-No. | | time | | |
| Decan-1-ol | not irritating | 4 h | rabbit | EPA OPPTS 870.2500 (Acute |
| 112-30-1 | | | | Dermal Irritation) |
| Cumene hydroperoxide 80-15-9 | corrosive | | rabbit | Draize Test |
| Maleic acid 110-16-7 | irritating | 24 h | human | Patch Test |

Serious eye damage/irritation:

| Hazardous components | Result | Exposure | Species | Method |
|----------------------|-------------------|----------|---------|-----------------------------|
| CAS-No. | | time | | |
| Decan-1-ol | irritating | | rabbit | EPA OPPTS 870.2400 (Acute |
| 112-30-1 | | | | Eye Irritation) |
| Maleic acid | highly irritating | | rabbit | OECD Guideline 405 (Acute |
| 110-16-7 | | | | Eye Irritation / Corrosion) |

Respiratory or skin sensitization:

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|------------------------------|-----------------|---|------------|---|
| Decan-1-ol 112-30-1 | not sensitising | Buehler test | guinea pig | EPA OPPTS 870.2600 (Skin Sensitisation) |
| Maleic acid 110-16-7 | sensitising | Mouse local lymphnod e assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |
| Maleic acid 110-16-7 | sensitising | Guinea pig maximisat ion test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |

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Germ cell mutagenicity:

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|------------------------------|----------|--|--|---------|---|
| Decan-1-ol 112-30-1 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | Henkel Method |
| 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 |
| Maleic acid 110-16-7 | negative | bacterial reverse mutation assay (e.g Ames test) | no data | | Ames Test |
| | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |

Carcinogenicity:

| Hazardous components CAS-No. | Result | Species | Sex | Exposure timeFrequenc y of treatment | Route of application | Method |
|------------------------------|------------------|---------|-------------|--|----------------------|---------------------------|
| Maleic acid | not carcinogenic | rat | male/female | 2 y | oral: feed | OECD Guideline 451 |
| 110-16-7 | | | | daily | | (Carcinogenicity Studies) |

Reproductive toxicity:

| Hazardous substances | Result / Classification | Species | Exposure | Species | Method |
|----------------------|-------------------------------|--------------|-----------|---------|--------------------------|
| CAS-No. | | | time | | |
| Maleic acid | NOAEL F1 = 150 mg/kg | Two | min. 80 d | rat | OECD Guideline 416 (Two- |
| 110-16-7 | NOAEL $F2 = 55 \text{ mg/kg}$ | generation | | | Generation Reproduction |
| | | study | | | Toxicity Study) |
| | | oral: gavage | | | |

Repeated dose toxicity

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|------------------------------|----------------------|------------------------|--|---------|--|
| Decan-1-ol 112-30-1 | NOAEL=1.000 mg/kg | dermal | 6 hours5d/w over 13 consecutive weeks | rat | OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |
| Cumene hydroperoxide 80-15-9 | | inhalation: aerosol | 6 h/d5 d/w | rat | not specified |
| Maleic acid 110-16-7 | NOAEL=>= 40 mg/kg | oral: feed | 90 ddaily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

SECTION 12: Ecological information

General ecological information:

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

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

12.1. Toxicity

Ecotoxicity:

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

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| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|--|---------------|---------------------|----------------------------|----------------|--------------------------------|---|
| Decan-1-ol 112-30-1 | LC50 | 2,2 - 2,5 mg/l | Fish | 96 h | Pimephales promelas | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| | NOEC | 0,26 mg/l | Fish | 33 d | Pimephales promelas | OECD Guideline 210 (fish early lite |
| Decan-1-ol 112-30-1 | EC50 | 2,9 mg/l | Daphnia | 48 h | Daphnia magna | stage toxicity test OECD Guideline 202 (Daphnia sp. Acute |
| Decan-1-ol 112-30-1 | EC50 | 1,5 mg/l | Algae | 72 h | Desmodesmus subspicatus | Immobilisation Test) QSAR (Quantitative Structure Activity |
| | EC10 | 0,7 mg/l | Algae | 72 h | Desmodesmus subspicatus | Relationship) QSAR (Quantitative Structure Activity |
| Decan-1-ol 112-30-1 | EC0 | 10.000 mg/l | Bacteria | 30 min | Pseudomonas putida | Relationship) DIN 38412, part 2 (Bacterial oxygen consumption test) |
| Decan-1-ol 112-30-1 | NOEC | 0,11 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, |
| Cumene hydroperoxide 80-15-9 | LC50 | 3,9 mg/l | Fish | 96 h | Oncorhynchus mykiss | Reproduction Test OECD Guideline 203 (Fish, Acute |
| Cumene hydroperoxide 80-15-9 | EC50 | 18 mg/l | Daphnia | 48 h | Daphnia magna | Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute |
| Cumene hydroperoxide 80-15-9 Cumene hydroperoxide | ErC50 EC10 | 3,1 mg/l 70 mg/l | Algae Bacteria | 72 h 30 min | Pseudokirchnerella subcapitata | Immobilisation Test) OECD Guideline 201 (Alga, Growt Inhibition Test) not specified |
| 80-15-9 Maleic acid 110-16-7 | LC50 | > 245 mg/l | Fish | 48 h | Leuciscus idus | DIN 38412-15 |
| Maleic acid 110-16-7 | EC50 | 42,81 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute |
| Maleic acid 110-16-7 | EC50 | 74,35 mg/l | Algae | 72 h | Pseudokirchnerella subcapitata | Immobilisation Test) OECD Guideline 201 (Alga, Growt |
| 1,4-Naphthalenedione 130-15-4 | EC50 | 0,011 mg/l | Algae | 72 h | Dunaliella bioculata | Inhibition Test) OECD Guideline 201 (Alga, Growt |
| N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) | LL50 | > 10 mg/l | Fish | 96 h | Oncorhynchus mykiss | Inhibition Test) OECD Guideline 203 (Fish, Acute |
| 123-26-2 N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2 | EL50 | > 10 mg/l | Daphnia | 48 h | Daphnia magna | Toxicity Test) OECD Guideline 202 (Daphnia sp Acute Immobilisation Test) |
| N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2 | EC50 | > 100 mg/l | Algae | 72 h | Pseudokirchnerella subcapitata | OECD Guideline 201 (Alga, Growt Inhibition Test) |
| 123-20-2 | NOEC | 100 mg/l | Algae | 72 h | Pseudokirchnerella subcapitata | OECD Guideline 201 (Alga, Growt Inhibition Test) |

12.2. Persistence and degradability

Persistence and Biodegradability: The product is not biodegradable.

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

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

12.3. Bioaccumulative potential / 12.4. Mobility in soil $\,$

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available for the product.

| Hazardous components CAS-No. | LogPow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|--|--------|-------------------------------|------------------|-------------|-------------|---|
| Decan-1-ol 112-30-1 Decan-1-ol 112-30-1 | 4,5 | 20 | | calculated | 25 °C | QSAR (Quantitative Structure Activity Relationship) OECD Guideline 117 (Partition Coefficient (noctanol / water), HPLC Method) |
| Cumene hydroperoxide 80-15-9 Cumene hydroperoxide 80-15-9 | 2,16 | 9,1 | | calculation | | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) not specified |
| Acetic acid, 2- phenylhydrazide 114-83-0 | 0,74 | | | | | not specified |
| Maleic acid 110-16-7 | -1,3 | | | | 20 °C | OECD Guideline 107 (Partition Coefficient (noctanol / water), Shake Flask Method) |
| 1,4-Naphthalenedione 130-15-4 | 1,71 | | | | | not specified |
| N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide) 123-26-2 | 5,86 | | | | | OECD Guideline 117 (Partition Coefficient (noctanol / water), HPLC Method) |

12.5. Results of PBT and vPvB assessment

| Hazardous components | PBT/vPvB |
|--|--|
| CAS-No. | |
| Cumene hydroperoxide | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 80-15-9 | Bioaccumulative (vPvB) criteria. |
| Maleic acid | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 110-16-7 | Bioaccumulative (vPvB) criteria. |
| N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan- | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 1-amide) | Bioaccumulative (vPvB) criteria. |
| 123-26-2 | |

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Product disposal:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

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

Waste code

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

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

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

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

< 5 %

VOC content (2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

Further information:

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

Label elements (DPD):

Xi - Irritant



Risk phrases:

R43 May cause sensitisation by skin contact.

Safety phrases:

S23 Do not breathe vapour.

S24/25 Avoid contact with skin and eyes.

S37 Wear suitable gloves.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children.

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Maleic acid

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.