

LOCTITE 270

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

Page 1 of 14

SDS No.: 346906

V006.1 Revision: 30.12.2016

printing date: 10.01.2018

Replaces version from: 29.09.2016

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

1.1. Product identifier

LOCTITE 270

Contains:

3,3,5 Trimethylcyclohexyl methacrylate 2,2'-Ethylenedioxydiethyl dimethacrylate Maleic acid Acetic acid, 2-phenylhydrazide

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives Wood Lane End

HP2 4RO 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):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

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.

MSDS-No.: 346906 LOCTITE 270 Page 2 of 14

V006.1

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Warning

Hazard statement: H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

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: P261 Avoid breathing vapours.

Prevention P273 Avoid release to the environment.

P280 Wear protective gloves.

Precautionary statement: P302+P352 IF ON SKIN: Wash with plenty of soap and water.

Response P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: 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:

Anaerobic adhesive

MSDS-No.: 346906 LOCTITE 270 Page 3 of 14

V006.1

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

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|---|-------------------------------|----------------|---|
| 3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9 | 231-927-0 | 25- 50 % | STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319 |
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | 203-652-6 01-2119969287-21 | 5-< 10 % | Skin Sens. 1B H317 |
| Cumene hydroperoxide 80-15-9 | 201-254-7 | 1-< 2,5 % | 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 |
| 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 |
| Acetic acid, 2-phenylhydrazide 114-83-0 | 204-055-3 | 0,1-< 1 % | Acute Tox. 3; Oral H301 Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 STOT SE 3; Inhalation H335 Carc. 2 H351 |
| 1,4-Naphthalenedione 130-15-4 | 204-977-6 | 100- < 250 PPM | 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 (Chron Aquat Tox): 10 |

MSDS-No.: 346906 LOCTITE 270 Page 4 of 14

V006.1

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

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:

Carbon dioxide, foam, powder

Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), 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 skin and eye contact.

Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

MSDS-No.: 346906 LOCTITE 270 Page 5 of 14

V006.1

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.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

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

Ensure good ventilation/extraction.

Store in a cool, well-ventilated place.

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

None

Occupational Exposure Limits

Valid for

Ireland

None

MSDS-No.: 346906 LOCTITE 270 Page 6 of 14

V006.1

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

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks | |
|--|------------------------------|-----------------|-------|-----|------------|--------------|---------|--|
| | | Periou | mg/l | ppm | mg/kg | others | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | aqua | | Ŭ | | | 0,164 mg/L | | |
| 109-16-0 | (freshwater) | | | | | _ | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | aqua (marine | | | | | 0,0164 mg/L | | |
| 109-16-0 | water) | | | | | | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | sewage | | | | | 10 mg/L | | |
| 109-16-0 | treatment plant (STP) | | | | | | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | aqua | | | | | 0,164 mg/L | | |
| 109-16-0 | (intermittent releases) | | | | | | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | sediment | | | | 1,85 mg/kg | | | |
| 109-16-0 | (freshwater) | | | | | | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | sediment | | | | 0,185 | | | |
| 109-16-0 | (marine water) | | | | mg/kg | | | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | soil | | | | 0,274 | | | |
| 109-16-0 | | | + | | mg/kg | 0.0021 7 | | |
| .alpha.,,alphaDimethylbenzyl hydroperoxide 80-15-9 | aqua (freshwater) | | | | | 0,0031 mg/L | | |
| .alpha.,.alphaDimethylbenzyl | aqua (marine | | | | | 0,00031 mg/L | | |
| hydroperoxide 80-15-9 | water) | | | | | ,,,,,,,, | | |
| .alpha.,.alphaDimethylbenzyl | aqua | | | | | 0,031 mg/L | | |
| hydroperoxide | (intermittent | | | | | | | |
| 80-15-9 | releases) | | | | | | | |
| .alpha.,.alphaDimethylbenzyl | Sewage | | | | | 0,35 mg/L | | |
| hydroperoxide 80-15-9 | treatment plant | | | | | | | |
| 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 | 5011 | | | | mg/kg | | | |
| 80-15-9 | | | | | | | | |
| Maleic acid 110-16-7 | aqua (freshwater) | | | | | 0,1 mg/L | | |
| Maleic acid | aqua | | 1 | | | 0,4281 mg/L | | |
| 110-16-7 | (intermittent releases) | | | | | 0,4201 mg/L | | |
| Maleic acid | sediment | | 1 | | 0,334 | | | |
| 110-16-7 | (freshwater) | | | | mg/kg | | | |
| Maleic acid | sewage | | | | 00 | 44,6 mg/L | | |
| 110-16-7 | treatment plant (STP) | | | | | ,8,- | | |
| Maleic acid | aqua (marine | İ | İ | | | 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 | | 1 | | | mg/kg | | | |

MSDS-No.: 346906 LOCTITE 270 Page 7 of 14

V006.1

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|--|-----------------------|----------------------|--|------------------|-------------------|---------|
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | Workers | inhalation | Long term exposure - systemic effects | | 48,5 mg/m3 | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | Workers | dermal | Long term exposure - systemic effects | | 13,9 mg/kg bw/day | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | General population | inhalation | Long term exposure - systemic effects | | 14,5 mg/m3 | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | General population | dermal | Long term exposure - systemic effects | | 8,33 mg/kg bw/day | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | General population | oral | Long term exposure - systemic effects | | 8,33 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:

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)

MSDS-No.: 346906 LOCTITE 270 Page 8 of 14

V006.1

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

green

Odor characteristic

Odour threshold No data available / Not applicable

pH No data available / Not applicable

Initial boiling point > 65 °C (> 149 °F) Flash point 110 °C (230 °F)

Decomposition temperature No data available / Not applicable

Vapour pressure 2,85 mbar

(25 °C (77 °F))

Density 1,10 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) Insoluble

(23 °C (73.4 °F); Solvent: Water)

Solubility (qualitative) Soluble

(Solvent: Acetone)

Solidification temperature No data available / Not applicable Melting point No data available / Not applicable Flammability No data available / Not applicable Auto-ignition temperature No data available / Not applicable **Explosive limits** No data available / Not applicable Partition coefficient: n-octanol/water No data available / Not applicable No data available / Not applicable Evaporation rate No data available / Not applicable Vapor density Oxidising properties No data available / Not applicable

9.2. Other information

MSDS-No.: 346906 LOCTITE 270 Page 9 of 14

V006.1

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Peroxides.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if used according to specifications.

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.

Inhalative toxicity:

Due to the low volatility of the product there are no hazards associated with inhalation under normal conditions of use

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious 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 | | |
| 2,2'-Ethylenedioxydiethyl | LD50 | 10.837 mg/kg | oral | | rat | not specified |
| dimethacrylate | | | | | | |
| 109-16-0 | | | | | | |
| 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 | | | | | | • |

MSDS-No.: 346906 LOCTITE 270 Page 10 of 14

V006.1

Acute inhalative toxicity:

| Hazardous components | Value | Value | Route of | Exposure | Species | Method |
|----------------------|-------|-------|-------------|----------|---------|--------|
| CAS-No. | type | | application | time | | |

Acute dermal toxicity:

| Hazardous components | Value | Value | Route of | Exposure | Species | Method |
|----------------------|-------|---------------|-------------|----------|---------|---------------|
| CAS-No. | type | | application | time | | |
| 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 | | |
| Cumene hydroperoxide 80-15-9 | corrosive | | rabbit | Draize Test |
| Maleic acid | irritating | 24 h | human | Patch Test |
| 110-16-7 | | | | |

Serious eye damage/irritation:

| Hazardous components | Result | Exposure | Species | Method |
|---------------------------|---------------------|----------|---------|-----------------------------|
| CAS-No. | | time | | |
| 2,2'-Ethylenedioxydiethyl | slightly irritating | 24 h | rabbit | OECD Guideline 405 (Acute |
| dimethacrylate | | | | Eye Irritation / Corrosion) |
| 109-16-0 | | | | |
| Maleic acid | highly irritating | | rabbit | OECD Guideline 405 (Acute |
| 110-16-7 | | | | Eye Irritation / Corrosion) |

${\bf Respiratory\ or\ skin\ sensitization:}$

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|------------------------------|-------------|---|------------|---|
| 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) |

Germ cell mutagenicity:

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | 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) |

MSDS-No.: 346906 LOCTITE 270 Page 11 of 14

V006.1

Reproductive toxicity:

| Hazardous substances | Result / Classification | Species | Exposure | Species | Method |
|----------------------|--------------------------------|--------------|-----------|---------|--------------------------|
| CAS-No. | | | time | | |
| Maleic acid | NOAEL $F1 = 150 \text{ mg/kg}$ | 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 | Result | Route of | Exposure time / | Species | Method |
|------------------------------|----------------------|------------------------|------------------------|---------|--|
| CAS-No. | | application | Frequency of treatment | | |
| 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:

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 | Exposure time | Species | Method |
|----------------------------------|---------------|------------|-------------------|---------------|--------------------------------|------------------------------------|
| | -J F - | | Study | | | |
| 2,2'-Ethylenedioxydiethyl | LC50 | 16,4 mg/l | Fish | 96 h | | OECD Guideline |
| dimethacrylate | | | | | | 203 (Fish, Acute |
| 109-16-0 | | | | | | Toxicity Test) |
| Cumene hydroperoxide | LC50 | 3,9 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline |
| 80-15-9 | | | | | | 203 (Fish, Acute |
| | , nasa | 40 " | | 40.1 | . | Toxicity Test) |
| Cumene hydroperoxide | EC50 | 18 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline |
| 80-15-9 | | | | | | 202 (Daphnia sp. |
| | | | | | | Acute Immobilisation |
| | | | | | | Test) |
| Cumene hydroperoxide | ErC50 | 3,1 mg/l | Algae | 72 h | Pseudokirchnerella subcapitata | OECD Guideline |
| 80-15-9 | LICSO | 3,1 mg/1 | Aigac | /211 | 1 seudokireimerena subcapitata | 201 (Alga, Growth |
| 00 13 7 | | | | | | Inhibition Test) |
| Cumene hydroperoxide | EC10 | 70 mg/l | Bacteria | 30 min | | not specified |
| 80-15-9 | | 7 4 8 - | | | | |
| Maleic acid | LC50 | > 245 mg/l | Fish | 48 h | Leuciscus idus | DIN 38412-15 |
| 110-16-7 | | • | | | | |
| Maleic acid | EC50 | 42,81 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline |
| 110-16-7 | | | | | | 202 (Daphnia sp. |
| | | | | | | Acute |
| | | | | | | Immobilisation |
| | | | | | | Test) |
| Maleic acid | EC50 | 74,35 mg/l | Algae | 72 h | Pseudokirchnerella subcapitata | OECD Guideline |
| 110-16-7 | | | | | | 201 (Alga, Growth |
| 1 4 Norbthalanadis | EC50 | 0.011 ma/1 | Alons | 72 h | Dunalialla hi aculat- | Inhibition Test) |
| 1,4-Naphthalenedione 130-15-4 | EC50 | 0,011 mg/l | Algae | 72 h | Dunaliella bioculata | OECD Guideline |
| 130-13-4 | | | | | | 201 (Alga, Growth Inhibition Test) |
| Į. | 1 1 | | I | 1 | | minomon rest) |

MSDS-No.: 346906 LOCTITE 270 Page 12 of 14

V006.1

12.2. Persistence and degradability

Persistence and Biodegradability:

No data available.

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|---|-----------------------|----------------------|---------------|---|
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | readily biodegradable | аррисацон | 85 % | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution 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 |

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 |
|---|--------|-------------------------------|---------------|-------------|-------------|--|
| 2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0 | 1,88 | | | | | not specified |
| Cumene hydroperoxide 80-15-9 | | 9,1 | | calculation | | OECD Guideline 305 (Bioconcentration: Flow- through Fish Test) |
| Cumene hydroperoxide 80-15-9 | 2,16 | | | | | not specified |
| Maleic acid 110-16-7 | -1,3 | | | | 20 °C | OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method) |
| Acetic acid, 2- phenylhydrazide 114-83-0 | 0,74 | | | | | not specified |
| 1,4-Naphthalenedione 130-15-4 | 1,71 | | | | | not specified |

12.5. Results of PBT and vPvB assessment

| Hazardous components | PBT/vPvB |
|--|--|
| CAS-No. | |
| 2,2'-Ethylenedioxydiethyl dimethacrylate | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very |
| 109-16-0 | Bioaccumulative (vPvB) criteria. |
| 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. |

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

MSDS-No.: 346906 LOCTITE 270 Page 13 of 14

V006.1

Product disposal:

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

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

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

VOC content (2010/75/EC) < 3 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

MSDS-No.: 346906 LOCTITE 270 Page 14 of 14

V006.1

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.

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.