



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

Page 1 of 18

LOCTITE LB 8018 400ML SFDN

SDS No. : 173457
V007.0

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

1.1. Product identifier

LOCTITE LB 8018 400ML SFDN

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

Intended use:
Lubricant

1.3. Details of the supplier of the safety data sheet

Henkel Ltd
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

| | |
|---|------------|
| Flammable aerosols | Category 1 |
| H222 Extremely flammable aerosol. | |
| H229 Pressurised container: May burst if heated. | |
| Specific target organ toxicity - single exposure | Category 3 |
| H336 May cause drowsiness or dizziness. | |
| Target organ: Central nervous system | |
| Chronic hazards to the aquatic environment | Category 2 |
| H411 Toxic to aquatic life with long lasting effects. | |

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

| | |
|--|--|
| Signal word: | Danger |
| Hazard statement: | H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. |
| Supplemental information | EUH066 Repeated exposure may cause skin dryness or cracking. |
| Precautionary statement: | P251 Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P211 Do not spray on an open flame or other ignition source. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P102 Keep out of reach of children. "***" ***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 | P261 Avoid breathing spray. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing. |

2.3. Other hazards

The aerosol container is under pressure. Do not expose to high temperatures.

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:

Lubricant

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

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|---|-------------------------------|----------------|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | 01-2119463258-33 | 75- < 100 % | Asp. Tox. 1 H304 Flam. Liq. 3 H226 STOT SE 3 H336 |
| Carbon dioxide 124-38-9 | 204-696-9 | 2,5- < 10 % | Press. Gas |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | 252-104-2 01-2119450011-60 | 2,5- < 10 % | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | 202-414-9 01-2119777867-13 | >= 0,25- < 1 % | Skin Corr. 1C H314 Acute Tox. 4; Oral H302 STOT RE 2 H373 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M factor (Acute Aquat Tox): 10 |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | 203-749-3 01-2119488991-20 | >= 0,25- < 1 % | Skin Irrit. 2 H315 Eye Dam. 1 H318 Acute Tox. 4 H332 Aquatic Acute 1 H400 |

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

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media:**

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

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

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid skin and eye contact.

Ensure adequate ventilation.

Remove sources of ignition.

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.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Use only in well-ventilated areas.

Avoid skin and eye contact.

Keep away from sources of ignition - no smoking.

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 a cool, well-ventilated place.

Keep away from heat and direct sunlight.

Refer to Technical Data Sheet

7.3. Specific end use(s)

Lubricant

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 |
|---|--------|-------------------|-----------------------------------|--|-----------------|
| Carbon dioxide 124-38-9 | | | | | |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 15.000 | 27.400 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 5.000 | 9.150 | Time Weighted Average (TWA): | | EH40 WEL |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 5.000 | 9.000 | Time Weighted Average (TWA): | Indicative | ECTLV |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)PROPANOL] | 50 | 308 | Time Weighted Average (TWA): | | EH40 WEL |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)PROPANOL] | | | Skin designation: | Can be absorbed through the skin. | EH40 WEL |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)-PROPANOL] | 50 | 308 | Time Weighted Average (TWA): | Indicative | ECTLV |

Occupational Exposure Limits

Valid for
Ireland

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|--------|-------------------|-----------------------------------|--|-----------------|
| Carbon dioxide 124-38-9 | | | | | |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 15.000 | 27.000 | Short Term Exposure Limit (STEL): | Indicative OELV | IR_OEL |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 5.000 | 9.000 | Time Weighted Average (TWA): | Indicative OELV | IR_OEL |
| Carbon dioxide 124-38-9 [CARBON DIOXIDE] | 5.000 | 9.000 | Time Weighted Average (TWA): | Indicative | ECTLV |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)-1-PROPANOL] | | | Skin designation: | Can be absorbed through the skin. | IR_OEL |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)-1-PROPANOL] | 50 | 308 | Time Weighted Average (TWA): | Indicative OELV | IR_OEL |
| (2-Methoxymethylethoxy)propanol 34590-94-8 [(2-METHOXYMETHYLETHOXY)-PROPANOL] | 50 | 308 | Time Weighted Average (TWA): | Indicative | ECTLV |

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---|------------------------------------|-----------------|------------------|-----|-----------------|--------|---------|
| | | | mg/l | ppm | mg/kg | others | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | aqua (freshwater) | | 19 mg/l | | | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | aqua (marine water) | | 1,9 mg/l | | | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | sewage treatment plant (STP) | | 4168 mg/l | | | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | sediment (freshwater) | | | | 70,2 mg/kg | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | sediment (marine water) | | | | 7,02 mg/kg | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | Soil | | | | 2,74 mg/kg | | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | aqua (intermittent releases) | | 190 mg/l | | | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | aqua (freshwater) | | 0,03 µg/l | | | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | aqua (marine water) | | 0,003 µg/l | | | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | aqua (intermittent releases) | | 0,3 µg/l | | | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | sewage treatment plant (STP) | | 0,27 mg/l | | | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | sediment (freshwater) | | | | 0,376 mg/kg | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | aqua (marine water) | | | | 0,0376 mg/kg | | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1- yl)ethanol 95-38-5 | Soil | | | | 0,075 mg/kg | | |
| (Z)-N-Methyl-N-(1-oxo-9- octadecenyl)glycine 110-25-8 | aqua (marine water) | | 0,000043 mg/l | | | | |
| (Z)-N-Methyl-N-(1-oxo-9- octadecenyl)glycine 110-25-8 | aqua (freshwater) | | 0,00043 mg/l | | | | |
| (Z)-N-Methyl-N-(1-oxo-9- octadecenyl)glycine 110-25-8 | aqua (intermittent releases) | | 0,0043 mg/l | | | | |

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|--|--------------------|-------------------|--|---------------|-------------|---------|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | Workers | dermal | Long term exposure - systemic effects | | 208 mg/kg | |
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | Workers | Inhalation | Long term exposure - systemic effects | | 871 mg/m3 | |
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | General population | dermal | Long term exposure - systemic effects | | 125 mg/kg | |
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | General population | Inhalation | Long term exposure - systemic effects | | 185 mg/m3 | |
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | General population | oral | Long term exposure - systemic effects | | 125 mg/kg | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | Workers | inhalation | Long term exposure - systemic effects | | 308 mg/m3 | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | Workers | dermal | Long term exposure - systemic effects | | 283 mg/kg | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | General population | oral | Long term exposure - systemic effects | | 36 mg/kg | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | General population | inhalation | Long term exposure - systemic effects | | 37,2 mg/m3 | |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | General population | dermal | Long term exposure - systemic effects | | 121 mg/kg | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | Workers | dermal | Acute/short term exposure - systemic effects | | 2 mg/kg | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | Workers | Inhalation | Acute/short term exposure - systemic effects | | 14 mg/m3 | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | Workers | dermal | Long term exposure - systemic effects | | 0,06 mg/kg | |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | Workers | Inhalation | Long term exposure - systemic effects | | 0,46 mg/m3 | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | oral | Acute/short term exposure - systemic effects | | 92 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | oral | Long term exposure - systemic effects | | 5 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | dermal | Long term exposure - systemic effects | | 5 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | dermal | Acute/short term exposure - systemic effects | | 50 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | Workers | dermal | Acute/short term exposure - systemic effects | | 100 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | Workers | dermal | Long term exposure - systemic effects | | 10 mg/kg | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | inhalation | Acute/short term exposure - local effects | | 9 mg/m3 | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | Workers | inhalation | Acute/short term exposure - local effects | | 18 mg/m3 | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | inhalation | Long term exposure - local effects | | 0,005 mg/m3 | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine | Workers | inhalation | Long term exposure - local | | 0,01 mg/m3 | |

| | | | | | | |
|---|--------------------|------------|---------------------------------------|--|-----------|--|
| 110-25-8 | | | effects | | | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | General population | inhalation | Long term exposure - systemic effects | | 0,1 mg/m3 | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | Workers | inhalation | Long term exposure - systemic effects | | 0,2 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)

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 aerosol light brown |
| Odor | characteristic |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Melting point | No data available / Not applicable |
| Solidification temperature | No data available / Not applicable |
| Initial boiling point | 162 °C (323.6 °F) |

| | |
|--|------------------------------------|
| Flash point | 39 °C (102.2 °F); no method |
| Evaporation rate | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Explosive limits | |
| lower | 0,6 % (V) |
| upper | 14,00 % (V) |
| Vapour pressure | 3,7 hPa |
| Relative vapour density: | No data available / Not applicable |
| Density | 0,81 g/cm ³ |
| (20 °C (68 °F)) | |
| Bulk density | No data available / Not applicable |
| Solubility | No data available / Not applicable |
| Solubility (qualitative) | Insoluble |
| (Solvent: Water) | |
| Solubility (qualitative) | Soluble |
| (Solvent: Acetone) | |
| 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

| | |
|----------------------|-----------------|
| Ignition temperature | 270 °C (518 °F) |
|----------------------|-----------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

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

Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

Irritating organic vapours.

SECTION 11: Toxicological information

General toxicological information:

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

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 |
|--|---------------|---------------|---------|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | LD50 | > 5.000 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | LD50 | 8.740 mg/kg | rat | not specified |
| 2-(2-Heptadec-8-enyl-2- imidazolin-1-yl)ethanol 95-38-5 | LD50 | 1.265 mg/kg | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | LD50 | > 5.000 mg/kg | rat | OECD Guideline 420 (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 |
|--|---------------|---------------|---------|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | LD50 | > 5.000 mg/kg | rabbit | OECD Guideline 402 (Acute Dermal Toxicity) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | LD50 | 9.510 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 |
|--|---------------|--------------|-----------------|------------------|---------|---|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | LC50 | > 5,6 mg/l | dust/mist | 4 h | rat | OECD Guideline 403 (Acute Inhalation Toxicity) |
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | LC50 | 55 - 60 mg/l | | 4 h | rat | not specified |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | LC50 | 1,37 mg/l | aerosol | 4 h | rat | BASF Test |

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 |
|---|----------------|------------------|---------|--|
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | not irritating | 2 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | not irritating | | human | not specified |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | irritating | | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

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 |
|---|----------------|------------------|---------|---|
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | not irritating | | human | not specified |
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | not irritating | | rabbit | Draize Test |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | irritating | | rabbit | 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 |
|---|-----------------|---------------------------------|------------|---|
| (2- Methoxymethylethoxy)pr opanol 34590-94-8 | not sensitising | Patch-Test | human | human repeat insult patch test |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |

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 |
|---|----------|--|--------------------------------------|---------|---|
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | Ames Test |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | yeast cytogenetic assay | with and without | | OECD Guideline 481 (Genetic Toxicology: Saccharomyces cerevisiae, Mitotic Recombination Assay) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | in vitro mammalian chromosome aberration test | with and without | | JAPAN: Guidelines for Screening Mutagenicity Testing Of Chemicals |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro | not applicable | | OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells In Vitro) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | mammalian cell gene mutation assay | without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |

Carcinogenicity

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

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Sex | Method |
|--|------------------|----------------------|--|---------|-------------|--|
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | not carcinogenic | inhalation: vapour | 2 years 6 h/day; 5 days/week | rat | male/female | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

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 |
|---|---|----------------------|----------------------|---------|---|
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL P 300 ppm NOAEL F1 1000 ppm NOAEL F2 1000 ppm | two-generation study | inhalation: vapour | rat | OECD Guideline 416 (Two-Generation Reproduction Toxicity Study) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | NOAEL P > 1.000 mg/kg | two-generation study | oral: feed | rat | not specified |

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 |
|---|---------------------|-------------------------|---|---------|--|
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL > 50 mg/l | inhalation | 2 weeks (9 exposures) 6 hours/day; 5 days/week | rabbit | not specified |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL 1.000 mg/kg | oral: gavage | 4 weeks daily | rat | not specified |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL 200 ppm | inhalation: vapour | 13 weeks 6 hours/day; 5 days/week | rat | OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL 2.850 mg/kg | dermal | 90 d 5 days/week | rabbit | OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |
| (2-Methoxymethylethoxy)pr opanol 34590-94-8 | NOAEL > 1.000 mg/kg | dermal | 4 weeks 4 hours/day; 5 days/week | rat | OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |
| (Z)-N-Methyl-N-(1-oxo- 9-octadecenyl)glycine 110-25-8 | NOAEL > 1.000 mg/kg | oral: feed | | rat | not specified |

Aspiration hazard:

The mixture is classified based on Viscosity data.

| Hazardous substances CAS-No. | Viscosity (kinematic) Value | Temperature | Method | Remarks |
|--|--------------------------------|-------------|---------------|---------|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | 0 mm ² /s | 40 °C | not specified | |

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 |
|--|---------------|--------------|---------------|---|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | LL50 | | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | LC50 | > 1.000 mg/l | 96 h | Poecilia reticulata | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | LC50 | 0,3 mg/l | | | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | LC50 | 2,6 mg/l | 96 h | Brachydanio rerio (new name: Danio rerio) | not specified |

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 |
|--|---------------|------------|---------------|----------------------------|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | EL50 | | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | EC50 | 1.919 mg/l | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | EC50 | 0,37 mg/l | | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | EC 50 | 0,61 mg/l | 48 h | Water flea (Daphnia magna) | |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | EC50 | 0,61 mg/l | | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

Chronic toxicity to aquatic invertebrates

No data available.

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 |
|--|---------------|------------|---------------|---------------------------------|---|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | EL50 | | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | NOELR | | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | EC50 | > 969 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | NOEC | 969 mg/l | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | NOEC | 0,011 mg/l | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | EC50 | 0,03 mg/l | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |

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 |
|---|---------------|------------|---------------|--------------------|--|
| (2-Methoxymethylethoxy)propanol 34590-94-8 | EC10 | 4.168 mg/l | 18 h | Pseudomonas putida | other guideline: |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | EC 50 | 26 mg/l | | | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | EC 50 | > 900 mg/l | 3 h | | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

12.2. Persistence and degradability

No data available.

| Hazardous substances CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|--|--------------------------|-----------|---------------|---------------|--|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | readily biodegradable | aerobic | 80 % | 28 d | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | readily biodegradable | aerobic | 76 % | 28 d | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | inherently biodegradable | aerobic | 94 % | 13 d | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | | aerobic | 1 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | | aerobic | 64 % | 28 d | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test) |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | readily biodegradable | aerobic | 100 % | 30 d | EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test) |

12.3. Bioaccumulative potential

No data available.

No substance data available.

12.4. Mobility in soil

The product evaporates readily.

| Hazardous substances CAS-No. | LogPow | Temperature | Method |
|---|--------|-------------|--|
| (2-Methoxymethylethoxy)propanol 34590-94-8 | 0,004 | 25 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | 7,51 | | not specified |

12.5. Results of PBT and vPvB assessment

| Hazardous substances CAS-No. | PBT / vPvB |
|--|---|
| Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1174522-20-3 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| (2-Methoxymethylethoxy)propanol 34590-94-8 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol 95-38-5 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| (Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine 110-25-8 | 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:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

Disposal must be made according to official regulations.

Waste code

14 06 03 - other solvents and solvent mixtures

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 | 1950 |
| RID | 1950 |
| ADN | 1950 |
| IMDG | 1950 |
| IATA | 1950 |

14.2. UN proper shipping name

| | |
|------|---|
| ADR | AEROSOLS |
| RID | AEROSOLS |
| ADN | AEROSOLS |
| IMDG | AEROSOLS (2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol,(Z)-N-Methyl-N-(1-oxo-9-octadecenyl)glycine) |
| IATA | Aerosols, flammable |

14.3. Transport hazard class(es)

| | |
|------|-----|
| ADR | 2.1 |
| RID | 2.1 |
| ADN | 2.1 |
| IMDG | 2.1 |
| IATA | 2.1 |

14.4. Packing group

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

14.5. Environmental hazards

| | |
|------|---------------------------|
| ADR | Environmentally Hazardous |
| RID | Environmentally Hazardous |
| ADN | Environmentally Hazardous |
| IMDG | Marine pollutant |
| IATA | not applicable |

14.6. Special precautions for user

| | |
|------|-----------------------------------|
| ADR | not applicable Tunnelcode: (D) |
| 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

| | |
|-----------------------------|--------|
| VOC content (2010/75/EC) | 89,6 % |
|-----------------------------|--------|

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:

H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
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.

Further information:

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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.