

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Molygen New Generation 5W-20 1 L
Art.: 8539

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

Relevant identified uses of the substance or mixture:

Hydraulic oil

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC17 - Hydraulic fluids

PC24 - Lubricants, greases, release products

Process category [PROC]:

PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 - Use of functional fluids in small devices

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 9a - Widespread use of functional fluid (indoor)

ERC 9b - Widespread use of functional fluid (outdoor)

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany
Phone:(+49) 0731-1420-0, Fax:(+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

Product can compose a film on the water surface, which can prevent oxygen exchange.

Hazardous to drinking water, on escape of even small quantities.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | |
|--|-----------------------|
| Registration number (REACH) | 01-2119474889-13-XXXX |
| Index | 649-483-00-5 |
| EINECS, ELINCS, NLP | 276-738-4 |
| CAS | 72623-87-1 |
| content % | 50-60 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Asp. Tox. 1, H304 |

| Highly refined mineral oil (C15 - C50) * | |
|---|-------------------|
| Registration number (REACH) | --- |
| Index | --- |
| EINECS, ELINCS, NLP | --- |
| CAS | --- |
| content % | 1-<10 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Asp. Tox. 1, H304 |

| Polyolefin polyamine succinimide, Polyol | |
|---|-------------------------------|
| Registration number (REACH) | --- |
| Index | --- |
| EINECS, ELINCS, NLP | 604-611-9 (REACH-IT List-No.) |
| CAS | 147880-09-9 |
| content % | 1-<2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Aquatic Chronic 4, H413 |

| Bis(nonylphenyl)amine | |
|---|-------------------------|
| Registration number (REACH) | 01-2119488911-28-XXXX |
| Index | --- |
| EINECS, ELINCS, NLP | 253-249-4 |
| CAS | 36878-20-3 |
| content % | <2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Aquatic Chronic 4, H413 |

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

* The contained mineral oil can be described by one or more of the following numbers:

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| EINECS, ELINCS, NLP | Registration number (REACH) | Chemical name |
|---------------------|-----------------------------|--|
| 265-090-8 | -- | Baseoil - unspecified |
| 265-091-3 | -- | Distillates (petroleum), solvent-refined light paraffinic |
| 265-097-6 | -- | Distillates (petroleum), solvent-refined heavy naphthenic |
| 265-098-1 | -- | Distillates (petroleum), solvent-refined light naphthenic |
| 265-101-6 | -- | Baseoil - unspecified |
| 265-156-6 | -- | Distillates (petroleum), hydrotreated light naphthenic |
| 265-157-1 | -- | Distillates (petroleum), hydrotreated heavy paraffinic |
| 265-158-7 | -- | Distillates (petroleum), hydrotreated light paraffinic |
| 265-159-2 | -- | Distillates (petroleum), solvent-dewaxed light paraffinic |
| 265-169-7 | -- | Distillates (petroleum), solvent-dewaxed heavy paraffinic |
| 276-737-9 | -- | Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based |
| 276-738-4 | -- | Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based |
| 278-012-2 | -- | Baseoil - unspecified |
| 265-155-0 | -- | Baseoil - unspecified |
| 276-735-8 | -- | Lubricating oils (petroleum), C>25, hydrotreated bright stock-based |
| 276-736-3 | -- | Baseoil - unspecified |
| 265-096-0 | -- | Residual oils (petroleum), solvent deasphalted |
| 265-160-8 | -- | Residual oils (petroleum), hydrotreated |
| 265-161-3 | -- | Lubricating oils (petroleum), hydrotreated spent |
| 265-166-0 | -- | Residual oils (petroleum), solvent-dewaxed |
| 265-176-5 | -- | Paraffin oils (petroleum), catalytic dewaxed light |

The substances named in this section are given with their actual, appropriate classification!
 For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!
 Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Unsuitable cleaning product:

Solvent
 Thinners

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.
 Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
 In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Irritation of the eyes

With long-term contact:

Drying of the skin.

Dermatitis (skin inflammation)

Oil acne

On vapour formation:

Irritation of the respiratory tract

Ingestion:

Gastrointestinal disturbances

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Nausea
Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂
Foam
Dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon
Oxides of nitrogen
Oxides of sulphur
Oxides of phosphorus
Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.
Avoid formation of oil mist.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.
Oil binder
Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid formation of oil mist.
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.

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Do not heat to temperatures close to flash point.
 Avoid contact with eyes.
 Avoid long lasting or intensive contact with skin.
 Do not carry cleaning cloths soaked in product in trouser pockets.
 Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
 Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.
 Store product closed and only in original packing.
 Under all circumstances prevent penetration into the soil.
 Store at room temperature.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Chemical Name | Oil mist, mineral | Content %: |
|---|--|------------|
| WEL-TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, ACGIH) | WEL-STEL: --- | --- |
| Monitoring procedures: | - Draeger - Oil 10/a-P (67 28 371) - Draeger - Oil Mist 1/a (67 33 031) | |
| BMGV: --- | Other information: --- | |

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | | | | | | |
|--|--|--------------------------|------------|-------|-------------------|------|
| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
| | Human - oral | | PNEC | 9,33 | mg/kg feed | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 1,2 | mg/m ³ | 24h |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 5,4 | mg/m ³ | 8h |

| Bis(nonylphenyl)amine | | | | | | |
|-----------------------|--|-----------------------------|------------|--------|--------------|------|
| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
| | Environment - freshwater | | PNEC | 0,1 | mg/l | |
| | Environment - marine | | PNEC | 0,01 | mg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 1 | mg/l | |
| | Environment - sewage treatment plant | | PNEC | 1 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 132000 | mg/kg dw | |
| | Environment - sediment, marine | | PNEC | 13200 | mg/kg dw | |
| | Environment - soil | | DNEL | 263000 | mg/kg dw | |
| | Environment - periodic release | | PNEC | 1 | mg/kg | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 0,31 | mg/kg bw/day | |

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| | | | | | | |
|---------------------|--------------------|-----------------------------|------|------|-------------------|--|
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 1,09 | mg/m ³ | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 0,31 | mg/kg bw/day | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 0,62 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 4,37 | mg/m ³ | |

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
 (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
 (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.
 Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
 These are specified by e.g. BS EN 14042.
 BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection:
 Protective gloves, oil resistant (EN 374)
 If applicable
 Protective nitrile gloves (EN 374).
 Protective Neoprene® / polychloroprene gloves (EN 374).
 Minimum layer thickness in mm:
 0,5
 Permeation time (penetration time) in minutes:
 >= 240
 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
 The recommended maximum wearing time is 50% of breakthrough time.
 Protective hand cream recommended.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
 Normally not necessary.
 With oil mist formation:
 Filter A2 P2 (EN 14387), code colour brown, white
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

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Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|---------------------------------|
| Physical state: | Liquid |
| Colour: | Brown |
| Odour: | Characteristic |
| Odour threshold: | Not determined |
| pH-value: | Not determined |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | Not determined |
| Flash point: | 230 °C |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | n.a. |
| Lower explosive limit: | Not determined |
| Upper explosive limit: | Not determined |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | 0,848 g/ml |
| Bulk density: | n.a. |
| Solubility(ies): | Not determined |
| Water solubility: | Insoluble |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Viscosity: | 46,8 mm ² /s (40°C) |
| Viscosity: | 8,35 mm ² /s (100°C) |
| Explosive properties: | Product is not explosive. |
| Oxidising properties: | No |

9.2 Other information

| | |
|---------------------------|----------------|
| Miscibility: | Not determined |
| Fat solubility / solvent: | Not determined |
| Conductivity: | Not determined |
| Surface tension: | Not determined |
| Solvents content: | Not determined |

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

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10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|----------|-------|------|----------|-------------|--------|
| Acute toxicity, by oral route: | | | | | | n.d.a. |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|------------------------------------|----------|-------|---------|----------|--|---|
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >5,53 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | |
| Skin corrosion/irritation: | | | | | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant, Repeated exposure may cause skin dryness or cracking. |
| Serious eye damage/irritation: | | | | | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | | OECD 406 (Skin Sensitisation) | No (skin contact) |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Carcinogenicity: | | | | | OECD 451 (Carcinogenicity Studies) | Negative |
| Carcinogenicity: | | | | | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Negative |
| Reproductive toxicity: | | | | | OECD 414 (Prenatal Developmental Toxicity Study) | Negative |

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| | | | | | | |
|------------------------|--|--|--|--|--|-------------|
| Reproductive toxicity: | | | | | OECD 421 (Reproduction/Developmental Toxicity Screening Test) | Negative |
| Aspiration hazard: | | | | | | Asp. Tox. 1 |

| Bis(nonylphenyl)amine | | | | | | |
|---|-----------------|--------------|-------------|------------------------|--|--------------------------------|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | Analogous conclusion |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact) |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Mouse | OECD 478 (Genetic Toxicology - Rodent dominant Lethal Test) | Negative, Analogous conclusion |
| Reproductive toxicity (Developmental toxicity): | NOAEL | 150 | mg/kg bw/d | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE), oral: | NOAEL | <100 | mg/kg bw/d | Rat | OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) | |

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

| Molygen New Generation 5W-20 1 L | | | | | | | |
|--|-----------------|-------------|--------------|-------------|-----------------|--------------------|--------------|
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| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and degradability: | | | | | | | n.d.a. |
| 12.3. Bioaccumulative potential: | | | | | | | n.d.a. |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| 12.6. Other adverse effects: | | | | | | | n.d.a. |

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | | | | | | | |
|---|-----------------|-------------|--------------|-------------|---------------------|--------------------------------------|--------------|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | NOEC/NOEL | 96h | ≥ 100 | mg/l | Pimephales promelas | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to fish: | LL50 | 96h | > 100 | mg/l | Pimephales promelas | OECD 203 (Fish, Acute Toxicity Test) | |

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| | | | | | | | |
|--|-----------|-------|--------|------|---------------------------------|--|--|
| 12.1. Toxicity to daphnia: | EL50 | 48h | >10000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | 10 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | |
| 12.1. Toxicity to algae: | NOEC/NOEL | 72h | >=100 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | EL50 | 48h | >100 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | 28d | 46 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | |
| 12.3. Bioaccumulative potential: | Log Kow | | 4,1 | | | | A notable biological accumulation potential has to be expected (LogPow > 3). |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| Toxicity to bacteria: | NOEC/NOEL | 10min | >1,93 | mg/l | | DIN 38412 T.8 | |

Bis(nonylphenyl)amine

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|--------------------------------------|----------|------|-------|------|---------------------------------|--|---|
| 12.1. Toxicity to fish: | LC50 | 96h | >100 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | 600 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | Analogous conclusion |
| 12.2. Persistence and degradability: | | 28d | 0-1 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | Not readily biodegradable, Analogous conclusion |
| 12.3. Bioaccumulative potential: | Log Pow | | >7,6 | | | | Concentration in organisms possible. |
| Toxicity to bacteria: | EC50 | 3h | >100 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |

SECTION 13: Disposal considerations

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13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.
 EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.
 Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
 13 01 10 mineral based non-chlorinated hydraulic oils

Recommendation:

Sewage disposal shall be discouraged.
 Pay attention to local and national official regulations.
 E.g. dispose at suitable refuse site.
 E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

15 01 01 paper and cardboard packaging
 15 01 02 plastic packaging
 15 01 04 metallic packaging

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

LQ: n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:

General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): 0,445 %

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15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 3, 8, 9, 11, 12, 15

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H304 May be fatal if swallowed and enters airways.

H413 May cause long lasting harmful effects to aquatic life.

Asp. Tox. — Aspiration hazard

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BSEF The International Bromine Council
bw body weight
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive

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IUCLID International Uniform Chemical Information Database

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available

n.c. not checked

n.d.a. no data available

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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