

Page 1 of 15 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 22.02.2019 / 0010 Replacing version dated / version: 27.09.2018 / 0009 Valid from: 22.02.2019 PDF print date: 09.03.2019 HYDRAULIKOEL HLP 10 20 L Art.: 4130

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

HYDRAULIKOEL HLP 10 20 L

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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

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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) Hazard class Hazard category Hazard stateme

Asp. Tox.

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Hazard statement H304-May be fatal if swallowed and enters airways.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H304-May be fatal if swallowed and enters airways.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331-Do NOT induce vomiting. P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal plant.

Distillates (petroleum), hydrotreated light paraffinic Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics Distillates (petroleum), solvent-dewaxed light paraffinic

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. Hydrocarbons can be harmful to water.

Endangerment of potable water possible.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

| Distillates (petroleum), hydrotreated light paraffinic | | | | | | |
|---|-----------------------|--|--|--|--|--|
| Registration number (REACH) | 01-2119487077-29-XXXX | | | | | |
| Index | 649-468-00-3 | | | | | |
| EINECS, ELINCS, NLP | 265-158-7 | | | | | |
| CAS | 64742-55-8 | | | | | |
| content % | 50-80 | | | | | |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Asp. Tox. 1, H304 | | | | | |
| | | | | | | |
| Distillates (petroleum), solvent-dewaxed light paraffinic | | | | | | |
| Registration number (REACH) | 01-2119480132-48-XXXX | | | | | |
| Index | 649-469-00-9 | | | | | |
| EINECS, ELINCS, NLP | 265-159-2 | | | | | |
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| CAS | 64742-56-9 |
|---|-------------------|
| content % | 50-80 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Asp. Tox. 1, H304 |
| | 1 · |

| Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% | |
|---|--|
| aromatics | |
| Registration number (REACH) | 01-2119827000-58-XXXX |
| Index | |
| EINECS, ELINCS, NLP | 934-956-3 (REACH-IT List-No.) |
| CAS | |
| content % | 10-30 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Asp. Tox. 1, H304 |
| | |
| | |
| 2,6-tert-butylphenol | |
| 2,6-tert-butylphenol Registration number (REACH) | |
| | |
| Registration number (REACH) | |
| Registration number (REACH) Index | |
| Registration number (REACH) Index EINECS, ELINCS, NLP | 204-884-0 |
| Registration number (REACH) Index EINECS, ELINCS, NLP CAS | 204-884-0 128-39-2 |
| Registration number (REACH) Index EINECS, ELINCS, NLP CAS content % | 204-884-0 128-39-2 0,1-<0,25 |

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

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.

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 - give copious water to drink. Consult doctor immediately.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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.

The following may occur: Irritation of the eyes With long-term contact: Drying of the skin. Dermatitis (skin inflammation) On vapour formation: Irritation of the respiratory tract Ingestion: Nausea Gastrointestinal disturbances Vomiting Danger of aspiration



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Oedema of the lungs

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In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Gastric lavage (stomach washing) only under endotracheal intubation. Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO2 Foam Dry extinguisher Water jet spray

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 sulphur Hydrogen sulphide 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. Remove possible causes of ignition - do not smoke. 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. Inform the competent authorities when water or canalisation has been infiltrated.

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) 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

Ensure good ventilation. Avoid contact with eyes or skin.



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Do not carry cleaning cloths soaked in product in trouser pockets. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Do not heat to temperatures close to flash point. Observe directions on label and instructions for use. Use working methods according to operating instructions.

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

Keep out of access to unauthorised individuals. Not to be stored in gangways or stair wells. Store product closed and only in original packing. Protect from direct sunlight and warming. Store in a dry place.

7.3 Specific end use(s)

GB

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/m3 (Mineral oil, excluding metal WEL-STEL: | | |
| working fluids, ACGIH) | | |
| Monitoring procedures: - Draeger - Oil 10/a-P (67 28 371) | | |
| - Draeger - Oil Mist 1/a (67 33 031) | | |
| BMGV: Other information: | - | |

| Distillates (petroleum), hydrotreated light paraffinic | | | | | | | | |
|--|-----------------------------------|--------------------------------|-----------------------------|-----|-----------------|------|--|--|
| Area of application | Exposure route / Environmental | Effect on health | Effect on health Descriptor | | Unit | Note | | |
| | compartment | | | | | | | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 1 | mg/kg bw/day | | | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 2,7 | mg/m3 | | | |

| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note |
|---------------------|--------------------------|--------------------------------|------------|--------------|-----------------|------|
| | Environmental | | | | | |
| | compartment | | | | | |
| | Environment - marine | | PNEC | 0,00004 5 | mg/l | |
| | Environment - freshwater | | PNEC | 0,001 | mg/l | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 1,67 | mg/kg | |
| Consumer | Human - oral | | DNEL | 6,75 | mg/kg bw/day | |
| Consumer | Human - inhalation | | DNEL | 20,9 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 2,77 | mg/kg | |
| Workers / employees | Human - dermal | | DNEL | 11,25 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | | DNEL | 70,61 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 5,8 | mg/m3 | |



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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 controls8.2.1 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:

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

Skin protection - Hand protection: Chemical resistant protective gloves (EN 374). If applicable Protective nitrile gloves (EN 374) Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes: 120 Protective hand cream recommended. 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. 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: 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.



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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.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Colour: Odour: Odour threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash point: Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure: Vapour density (air = 1): Density: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Viscosity: Explosive properties: Oxidising properties: 9.2 Other information

9.2 Other Information Miscibility:

Fat solubility / solvent: Conductivity: Surface tension: Solvents content:

Liquid Yellow Characteristic Not determined n.a. Not determined Not determined 175 °C Not determined n.a. Not determined Not determined Not determined Not determined 0,84 g/ml (20°C) n.a. Not determined Insoluble Not determined Not determined Not determined 10 mm2/s (40°C) 2,7 mm2/s (100°C) Product is not explosive. No Not determined Not determined Not determined Not determined

SECTION 10: Stability and reactivity

Not determined

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
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



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11.1 Information on toxicological effects

| Possibly more information on hea | | | classification) | | | |
|----------------------------------|----------|-------------|-----------------|----------|-------------|--------|
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| Art.: 4130 | | | | | | |
| 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 | | | | | | n.d.a. |
| sensitisation: | | | | | | |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - | | | | | | n.d.a. |
| single exposure (STOT-SE): | | | | | | |
| Specific target organ toxicity - | | | | | | n.d.a. |
| repeated exposure (STOT-RE): | | | | | | |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |

| 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 | mg/l/4h | Rat | OECD 403 (Acute | Aerosol |
| | | | | | Inhalation Toxicity) | |
| Skin corrosion/irritation: | | | | | | Not irritant, |
| | | | | | | Repeated |
| | | | | | | exposure may |
| | | | | | | cause skin |
| | | | | | | dryness or |
| | | | | | | cracking. |
| Serious eye damage/irritation: | | | | | | Not irritant |
| Respiratory or skin | | | | | | No (skin contact) |
| sensitisation: | | | | | | |
| Respiratory or skin | | | | | | No (inhalation |
| sensitisation: | | | | | | and skin contact) |
| Aspiration hazard: | | | | | | Yes |

| 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 | Rat | OECD 403 (Acute | |
| | | | | | Inhalation Toxicity) | |
| Skin corrosion/irritation: | | | | Rabbit | | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | | Not irritant |
| Respiratory or skin | | | | Guinea pig | | No (skin contact) |
| sensitisation: | | | | | | |
| Germ cell mutagenicity: | | | | Mammalian | OECD 474 (Mammalian | Negative |
| | | | | | Erythrocyte | - |
| | | | | | Micronucleus Test) | |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial | Negative |
| | | | | | Reverse Mutation Test) | - |



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| Germ cell mutagenicity: | | | | | OECD 473 (In Vitro | Negative |
|-------------------------|-------|-------|-------|-------|--------------------------|------------------|
| | | | | | Mammalian | |
| | | | | | Chromosome | |
| | | | | | Aberration Test) | |
| Germ cell mutagenicity: | | | | | OECD 476 (In Vitro | Negative |
| | | | | | Mammalian Cell Gene | |
| | | | | | Mutation Test) | |
| Carcinogenicity: | | | | Mouse | | Female, Negative |
| Reproductive toxicity: | NOAEL | >2000 | mg/kg | Rat | OECD 414 (Prenatal | |
| | | | bw/d | | Developmental Toxicity | |
| | | | | | Study) | |
| Reproductive toxicity: | NOAEL | >1000 | mg/kg | Rat | OECD 421 | |
| | | | bw/d | | (Reproduction/Developm | |
| | | | | | ental Toxicity Screening | |
| | | | | | Test) | |
| Aspiration hazard: | | | | | | Yes |
| Symptoms: | | | | | | drying of the |
| | | | | | | skin., vomiting, |
| | | | | | | nausea |

| 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 | >3160 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | 24h |
| Acute toxicity, by inhalation: | LC50 | >5266 | mg/m3/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Aerosol |
| Skin corrosion/irritation: | | | | | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Germ cell mutagenicity: | | | | | | Negative |
| Reproductive toxicity: | | | | | | Negative |
| Aspiration hazard: | | | | | | Yes |
| Symptoms: | | | | | | vomiting, skin afflictions |

| 2,6-tert-butylphenol | | | | | | | | |
|---|----------|-------|---------------|------------|-----------------------------------|---|--|--|
| 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 | 10000 | mg/kg | Rabbit | | | | |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact) | | |
| Symptoms: | | | | | | burns, nausea and vomiting., sore throat, stomach pain | | |
| Specific target organ toxicity - repeated exposure (STOT-RE), oral: | NOAEL | 100 | mg/kg bw/d | Rat | | Target organ(s): liver | | |

SECTION 12: Ecological information

| Test method | Notes |
|-------------|-------------|
| | n.d.a. |
| | n.d.a. |
| | Test method |



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| 12.1. Toxicity to algae: | | | n.d.a. |
|--------------------------|--|--|-------------------|
| 12.2. Persistence and | | | Isolate as much |
| degradability: | | | as possible with |
| | | | an oil separator. |
| 12.3. Bioaccumulative | | | n.d.a. |
| potential: | | | |
| 12.4. Mobility in soil: | | | n.d.a. |
| 12.5. Results of PBT | | | n.d.a. |
| and vPvB assessment | | | |
| 12.6. Other adverse | | | n.d.a. |
| effects: | | | |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|-----------|------|--------|------|-------------------------------------|--|---|
| 12.1. Toxicity to fish: | LL50 | 96h | >100 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to fish: | NOEC/NOEL | 28d | >1000 | mg/l | Oncorhynchus mykiss | QSÁR | |
| 12.1. Toxicity to daphnia: | EC50 | 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) | |
| 12.3. Bioaccumulative potential: | | | | | | | Not to be expected |
| 12.1. Toxicity to algae: | EL50 | 72h | >100 | mg/l | Pseudokirchneriell a subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | | 31 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | Not readily biodegradable |
| 12.2. Persistence and degradability: | | 28d | 31 | % | | OECD 301 F (Ready Biodegradability - Manometric Respirometry Test) | Not readily biodegradable |
| 12.3. Bioaccumulative potential: | Log Pow | | >6 | | | | @20°C |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |

| Distillates (petroleum), s | | | 1 | | | | |
|----------------------------|-----------|------|--------|------|---------------|--------------------|-------|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | 10 | mg/l | Daphnia magna | OECD 211 | |
| | | | | | | (Daphnia magna | |
| | | | | | | Reproduction Test) | |
| 12.1. Toxicity to fish: | LL50 | 96h | >100 | mg/l | Pimephales | OECD 203 (Fish, | |
| | | | | | promelas | Acute Toxicity | |
| | | | | | - | Test) | |
| 12.1. Toxicity to daphnia: | EL50 | 48h | >10000 | mg/l | Daphnia magna | OECD 202 | |
| | | | | | | (Daphnia sp. | |
| | | | | | | Acute | |
| | | | | | | Immobilisation | |
| | | | | | | Test) | |



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œ)

| 12.1. Toxicity to daphnia: | LL50 | 48h | >1000 | mg/l | Gammarus sp. | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
|--------------------------------------|-----------|-----|-------|------|-------------------------------------|--|----------|
| 12.1. Toxicity to algae: | NOEC/NOEL | 72h | >100 | mg/l | Pseudokirchneriell a subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | | | | | , | Inherent |
| 12.3. Bioaccumulative potential: | Log Pow | | >3 | | | | Low |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|----------|------|--------|------|-------------------------|---|---|
| 12.1. Toxicity to fish: | LL50 | 96h | >1028 | mg/l | Scophthalmus maximus | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to daphnia: | LL50 | 48h | >3193 | mg/l | Acartia tonsa | ISO 14669 | |
| 12.1. Toxicity to algae: | ErL50 | 72h | >10000 | mg/l | Skeletonema costatum | ISO 10253 | |
| 12.2. Persistence and degradability: | | 28d | 74 | % | | OECD 306 (Biodegradability in Seawater) | Readily biodegradable |
| 12.3. Bioaccumulative potential: | | | | | | | Yes |
| 12.4. Mobility in soil: | | | | | | | Not to be expected |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|--------------------------------------|----------|------|----------|------|---------------------------|---|------------------------------|
| 12.1. Toxicity to fish: | LC50 | 96h | 1,4 | mg/l | Pimephales promelas | OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 0,45-0,8 | mg/l | Daphnia magna | U.S. ÉPA ECOTOX Database | |
| 12.1. Toxicity to daphnia: | LC50 | 21d | 0,23 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | |
| 12.1. Toxicity to algae: | EC50 | 3d | 3,6 | mg/l | Selenastrum capricornutum | | |
| 12.2. Persistence and degradability: | DOC | 28d | 24 | % | | OECD 302 B (Inherent Biodegradability - Zahn- Wellens/EMPA Test) | Not readily biodegradable |
| 12.3. Bioaccumulative potential: | Log Kow | | 4,5 | | | , | |

SECTION 13: Disposal considerations

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.:



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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.

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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: Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

0%

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information



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Revised sections: 2, 3, 8, 11, 12, 16 These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

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

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|--|--|
| Asp. Tox. 1, H304 | Classification according to calculation procedure. |

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.

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Asp. Tox. — Aspiration hazard Skin Irrit. — Skin irritation Aquatic Acute — Hazardous to the aquatic environment - acute Aquatic Chronic — Hazardous to the aquatic environment - chronic

Any abbreviations and acronyms used in this document:

AC Article Categories according, according to acc., acc. to ACGIH American Conference of Governmental Industrial Hygienists Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) AOEL Acceptable Operator Exposure Level AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) ATE Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation) BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BMGV Biological monitoring guidance value (EH40, UK) BOD Biochemical oxygen demand BSEF Bromine Science and Environmental Forum body weight bw CAS **Chemical Abstracts Service** Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CEC CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques CIPAC Collaborative International Pesticides Analytical Council CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic COD Chemical oxygen demand CTFA Cosmetic, Toiletry, and Fragrance Association DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon DT50 Dwell Time - 50% reduction of start concentration



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| Art.: 41 | 30 |
| SVS dw | Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) dry weight |
| ə.g. | for example (abbreviation of Latin 'exempli gratia'), for instance |
| EC ECHA | European Community European Chemicals Agency |
| EEA | European Economic Area |
| EEC EINEC | European Economic Community S European Inventory of Existing Commercial Chemical Substances |
| ELINC | |
| EN | European Norms |
| EPA ERC | United States Environmental Protection Agency (United States of America) Environmental Release Categories |
| ΞS | Exposure scenario |
| etc. EU | et cetera European Union |
| EWC | European Waste Catalogue |
| ax. | Fax number |
| gen. GHS | general Globally Harmonized System of Classification and Labelling of Chemicals |
| GWP | Global warming potential |
| HET-C | 66 · |
| ARC | Halocarbon Global Warming Potential International Agency for Research on Cancer |
| ATA | International Air Transport Association |
| BC BC (C | Intermediate Bulk Container ode) International Bulk Chemical (Code) |
| C (C | Inhibitory concentration |
| MDG- | code International Maritime Code for Dangerous Goods |
| ncl. UCLIE | including, inclusive Dinternational Uniform ChemicaL Information Database |
| _C | lethal concentration |
| _C50 | lethal concentration 50 percent kill |
| _CLo _D | lowest published lethal concentration Lethal Dose of a chemical |
| _D50 | Lethal Dose, 50% kill |
| | Lethal Dose Low . Lowest Observed Adverse Effect Level |
| - | Lowest Observed Effect Concentration |
| | Lowest Observed Effect Level |
| _Q MARP(| Limited Quantities OL International Convention for the Prevention of Marine Pollution from Ships |
| n.a. | not applicable |
| า.av. า.c. | not available not checked |
| | no data available |
| | National Institute of Occupational Safety and Health (United States of America) |
| | CNo Observed Adverse Effective Concentration _ No Observed Adverse Effect Level |
| | No Observed Effect Concentration |
| NOEL ODP | No Observed Effect Level Ozone Depletion Potential |
| | Organisation for Economic Co-operation and Development |
| org. | organic |
| PAH PBT | polycyclic aromatic hydrocarbon persistent, bioaccumulative and toxic |
| | Chemical product category |
| PΕ | Polyethylene |
| | Predicted No Effect Concentration Photochemical ozone creation potential |
| opm | parts per million |
| ROC | Process category |
| | Polytetrafluorethylene |



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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:

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