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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 HyPER SG 1-32 20 L Art.: 20636

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]:

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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 Tel.: (+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)



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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture 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)

Not applicable

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)

SECTION 3: Composition/information on ingredients

3.1 Substance

1907/2006 (< 0,1 %).

n.a. 3.2 Mixture

| Registration number (REACH) | |
|---|--|
| Index | |
| EINECS, ELINCS, NLP | |
| CAS | |
| content % | |
| Classification according to Regulation (EC) 1272/2008 (CLP) | |

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

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. 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.

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**

Symptomatic treatment.

SECTION 5: Firefighting measures



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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 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 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) and dispose of according to Section 13. Fill the absorbed material into lockable containers.

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. Avoid contact with eyes or 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.



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Store product closed and only in original packing. Under all circumstances prevent penetration into the soil. Store at room temperature. Store in a dry place. **7.3 Specific end use(s)**

No information available at present.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Chemical Name C | Dil mist, mineral | | | Content %: |
|------------------------------------|-------------------|------------------------------------|--------------------|------------|
| WEL-TWA: 5 mg/m3 (Mineral oil, exc | cluding metal | WEL-STEL: | | |
| working fluids, ACGIH) | | | | |
| Monitoring procedures: | - [| Draeger - Oil Mist 1/a (67 33 031) | | |
| BMGV: | | | Other information: | |

| Distillates (petroleum), hydrotreated heavy paraffinic | | | | | | |
|--|----------------------------|------------------|------------|-------|-------|------|
| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note |
| | Environmental | | _ | | | |
| | compartment | | | | | |
| | Environment - oral (animal | | PNEC | 9,33 | mg/kg | |
| | feed) | | | | | |

B 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 (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE).
(11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | 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. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

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: With danger of contact with eyes. Tight fitting protective goggles with side protection (EN 166).



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Skin protection - Hand protection: Protective gloves, oil resistant (EN 374). If applicable Protective nitrile gloves (EN 374). Protective gloves made of polyvinyl alcohol (EN 374). Protective Viton® / fluoroelastomer gloves (EN 374). Minimum layer thickness in mm: 0,5 Permeation time (penetration time) in minutes: 480 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

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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: | n.a. |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | Not determined |
| Flash point: | 216 °C |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | Not determined |
| Lower explosive limit: | Not determined |
| Upper explosive limit: | Not determined |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | 0,861 g/ml |
| Bulk density: | Not determined |
| Solubility(ies): | Not determined |
| Water solubility: | Insoluble |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| | |



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Viscosity: Viscosity: Explosive properties: Oxidising properties:

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9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: 32 mm2/s (40°C) 5,50 mm2/s (100°C) No No

Not determined Not determined Not determined 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

Strong heat **10.5 Incompatible materials**

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

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). Hydraulikoel HyPER SG 1-32 20 L

| 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. |

SECTION 12: Ecological information

| Possibly more information on environmental effects, see Section 2.1 (classification). | | | | | | | |
|---|----------|------|-------|------|----------|-------------|--------|
| Hydraulikoel HyPER SG 1-32 20 L | | | | | | | |
| Art.: 20636 | | | | | | | |
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| | | | | | | | |



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| 12.1. Toxicity to daphnia: | n.d.a. |
|----------------------------|--------|
| 12.1. Toxicity to algae: | n.d.a. |
| 12.2. Persistence and | n.d.a. |
| degradability: | |
| 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: | |

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.:

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:

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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.

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: Transport by road/by roil (ADB/BID) | n.a. |
|---|----------------------|
| Transport by road/by rail (ADR/RID) 14.2. UN proper shipping name: | |
| 14.2. On proper shipping hame. 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: 14.5. Environmental hazards: | n.a. Natanniaahla |
| | Not applicable |
| 14.6. Special precautions for user | |

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



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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):

< 0,1 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

2, 3, 8, 11, 12

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).

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 body weight bw CAS **Chemical Abstracts Service** Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances CLP and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level dw dry weight for example (abbreviation of Latin 'exempli gratia'), for instance e.g. European Community EC ECHA European Chemicals Agency EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances ΕN **European Norms** FPA United States Environmental Protection Agency (United States of America) et cetera etc. European Union EU

EVAL Ethylene-vinyl alcohol copolymer



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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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