

**Safety data sheet**  
according to 1907/2006/EC, Article 31

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Printing date 22.11.2022

Version number 2

Revision: 23.04.2021

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

· **1.1 Product identifier**

· **Trade name:** Hydro HLP 46

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture**

Hydraulic fluid

Viskosität : ISO VG 46

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Hengst SE

Nienkamp 55-85

48147 Münster

Germany

T +49 (0)251 20 20 2-0

F +49 (0)251 20 20 2-646

· **Further information obtainable from:** [oil@hengst.com](mailto:oil@hengst.com)

· **1.4 Emergency telephone number:**

Informationszentrale gegen Vergiftungen Uni - Klinikum Bonn; Notfall - Nr.: +49 228 19 240

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.1 Substances**

· **CAS No. Description**

Not applicable

· **Identification number(s)**

· **EC number:** Not applicable

· **3.2 Mixtures**

· **Description:** Preparation of base oils and additives.

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- **Dangerous components:** Void
- **SVHC** None
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **General information:** Take affected persons out of danger area and lay down.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling** Avoid the formation of oil haze.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Note Regulation on facilities for the storage, filling and handling water-polluting substances. ...
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Protect from contamination.  
Storage in a collecting room is required.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

Oilfog and Oilfumes	TLV-8h-TWA	5mg/m <sup>3</sup>
	TLV-15min-STEEL	10mg/m <sup>3</sup>
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Hand protection**  
Preventive skin protection by use of skin-protecting agents is recommended.  
Check the permeability prior to each renewed use of the glove.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:** Leather gloves
- **Eye/face protection** Goggles recommended during refilling
- **Body protection:** Protective work clothing

\* **SECTION 9: Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**

- **Physical state** Fluid
- **Colour:** Brown
- **Odour:** Mineral-oil-like
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** Undetermined.
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** 0.6 Vol % (DIN EN 1839)
- **Upper:** 6.5 Vol % (DIN EN 1839)
- **Flash point:** 232 °C (DIN ISO 2592)
- **Decomposition temperature:** Not determined.
- **pH** Not determined.
- **Viscosity:**
- **Kinematic viscosity at 40 °C** 45.8 mm<sup>2</sup>/s (DIN 51562)
- **Dynamic:** Not determined.
- **Solubility**
- **water:** Not miscible or difficult to mix.
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure:** Not determined.
- **Density and/or relative density**
- **Density at 20 °C:** 0.871 g/cm<sup>3</sup> (DIN 51757)
- **Relative density** Not determined.
- **Vapour density** Not determined.

· **9.2 Other information**

- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Auto-ignition temperature:** Not determined.
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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- **Change in condition**
- **Softening point/range**
- **Pour point** - 27 °C (DIN ISO 3016)
- **Evaporation rate** Not determined.
- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**  
**CAS: 68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts**  
Oral LD50 >2,000 mg/kg (rat)
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

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- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**  
None of the ingredients is listed.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:**  
The product spreads out on the surface of the water. A small fraction of the constituents will be dissolved. It prevents the solution of oxygen and can cause the death of water organisms.
- **12.2 Persistence and degradability** Not easily biodegradable
- **Degree of elimination:**  
**CAS: 68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts**  
EC50 1-1.5 mg/kg (daphnia) (OECD Guide-line 202 part1, Daphnia A.I.T.)
- **12.3 Bioaccumulative potential** Non significant accumulation in organisms
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** The product can easily be separated by an oil separator (skimmer) of the water surface.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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**SECTION 13: Disposal considerations****· 13.1 Waste treatment methods****· Recommendation**

When storing used mineral oil products, ensure that the categories for waste oil and mixing instructions are observed.

Delivery of waste oil to officially authorised collectors only.

**· European waste catalogue**

13 01 10\* mineral based non-chlorinated hydraulic oils

**· Uncleaned packaging:****· Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

**SECTION 14: Transport information****· 14.1 UN number or ID number**

· ADR, ADN, IMDG, IATA

Void

**· 14.2 UN proper shipping name**

· ADR, ADN, IMDG, IATA

Void

**· 14.3 Transport hazard class(es)**

· ADR, ADN, IMDG, IATA

· Class

Void

**· 14.4 Packing group**

· ADR, IMDG, IATA

Void

**· 14.5 Environmental hazards:**

· Marine pollutant:

No

**· 14.6 Special precautions for user**

Not applicable.

**· 14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· UN "Model Regulation":

Void

**SECTION 15: Regulatory information**

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

· Labelling according to Regulation (EC) No 1272/2008 Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

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**· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

CAS: 26571-11-9 26-(nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxahehexacosan-1-ol: Sunset date: 2021-01-04

**· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

**· National regulations:****· Additional classification according to Decree on Hazardous Materials, Annex II:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**· Information about limitation of use: none****· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.****\* SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Department issuing SDS: Product safety****· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

**· Sources Concawe Product Dossier No.97/108. Concawe Product Dossier Nn. 01/54.****· \* Data compared to the previous version altered.**

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