

High performance Hydraulic Oil HLP 46

Material Safety Data Sheet

According to Directive (EG) No. 1907/2006

1. Identification of the Preparation and of the Company

1.1 Identification of the Product

Trade Name: High performance Hydraulic Oil HLP 46 (Hochleistungs-Hydrauliköl HLP 46)

Main use of the products: Hydraulic Oil

Used in all Hydraulic Jacks manufactured by JUNG Hebe-und Transporttechnik,

1.2 Identification of the Manufacturer

Company

EMKA Schmiertechnik GmbH
Schmalbachstr. 19
74626 Bretzfeld-Schwabbach
Germany
Telephone +49 (0) 7946/94470-0
Telefax +49 (0) 7946/94470-70

Emergency call of the company

Telephone: +49 (0) 7946/94470-33 (Hr. Christian Kilthau) ; E-Mail: info@emka-oil.de

2. Composition / Information on Ingredients

General Description:

Additives
Mineral Oil, refined

2.1 Chemical Identification	% Range	Symbol	R-Phrase	CAS	EINECS, ELINCS
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Composition is not categorized as hazardous.

3. Hazardous Identification

3.1 Health Hazards

See also Items 11 und 15.

Preparation is not categorised as hazardous in terms of directive 1999/45/EC.

3.2 Environmental Hazards

See Item 12.

Product can build up a film on the water surface which can inhibit the oxygen exchange.

4. First Aid Measures

4.1 Inhalation

Provide affected person with fresh air and depending on symptomatic get medical attention.

4.2 Eye contact

Immediately flush eyes with large amounts of water, if necessary get medical attention.

Carry along Data Sheet.

4.3 Skin contact

Flash with large amounts of water and soap, remove grossly contaminated clothing, in case of skin irritation (redness etc.) get medical attention.

4.4 If swallowed

Do not induce vomiting, get prompt medical attention.

Danger of aspiration.

5. Fire Fighting Measures

5.1 Suitable extinguishing media

Carbon dioxide

Foam

Dry fire-extinguishing media

Water spray jet

Cool containers at risk with water.

5.2 Extinguishing media which must not be used for safety reasons

Full water jet

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products or resulting gases

Substances potentially set free in case of fire:

Smoke

Carbon oxides

Sulfur oxides

Phosphorus oxides, nitrogen oxides

Hydrocarbons

Aldehydes

Hydrogen sulfide

Zinc oxides

Hot product may produce flammable vapours.

5.4 Special protective equipment for fire fighting

Use breathing apparatus with independent air supply.

According to fire magnitude full protective clothing if necessary.

5.5 Additional information

Dispose contaminated fire fighting water according to official directives.

6. Accidental release measures

See item 13.as well as personal protective equipment see item 8.

6.1 Personal precautions

Ensure adequate ventilation.

Keep away sources of ignition, do not smoke

Avoid eye and skin contact as well as inhalation.

Do not leave cloths saturated with the product in trouser pockets.

Attention, risk of slipping.

6.2 Environmental precautions

Contain spillage.

Do not allow to enter drains.

Avoid to enter surface waters or groundwater as well as into soil.

6.3 Methods for cleaning up

Pick up with absorbent material (e.g. Oil Dri Standard), treat recovered material as prescribed in item 13.

7. Handling and Storage

7.1 Handling

Hints for safe handling

See item 6.1

Avoid eye and skin contact.

Avoid formation of oil sprays.

Keep away from sources of ignition - refrain from smoking.

Wash hands before breaks and on finishing work.

Apply the general hygienic measures for handling of chemicals.

Pay regard to the indications on the label and from the instructions for use.

Do not heat up to temperatures near flashpoint ($T > 180^{\circ}\text{C}$).

Possibly take precautionary measures against electrostatic loading.

Possibly take precautionary measures against risk of explosion.

Fire class: B

7.2 Storage

Requirements for storage rooms and vessels:

Do not store product in alley ways and staircases.

Store only in original container and keep locked up.

Do not store together with fire promoting or spontaneously combustible substances.

Further information on storage conditions:

See Item 10.2

Keep locked up and avoid humidity.

Store in a cool place.

Store at temperatures not exceeding 50°C .

8. Exposure limitation and personal protective equipment

Ensure sufficient aeration. This can be achieved by local exhaust ventilation or general exhaust air.

If this is not sufficient to keep concentrations below MAK values suitable respiratory protection apparatus has to be worn.

Chemical name	% Area	MAK, TRK value	BAT value
Mineral oil mist		5 mg/m ³ (TLV-ACGIH)	

8.1 Respiratory protection:

In case of mineral oil mist formation

In case of vapour formation:

Filter A - P2 (EN 141)

Not required in normal case.

8.2 Hand protection:

Protecting gloves made of PVC (EN 374)

or:

Protecting gloves made of Nitrile (EN 374)

Skin care creme recommendable.

Protection gloves, oil resistant (EN 374)

8.3 Eye protection:

If there is a risk of eye contact:

Eye glasses with side protection (EN 166).

8.4 Protective clothing:

According to working process.

Apron

Boots (EN 347)

Protecting work clothes (e.g. safety shoes EN 344, work clothes with long arms)

Additional information with regard to the hand protection -No tests have not been carried out.

The choices for the preparations have been selected to the best of one's knowledge and by the information about the ingredients. The choices for substances have been derived from the specifications of the glove manufacturers. The final selection of the glove material has to take into account the breakthrough times, the permeation rates and the degradation.

The selection of a suitable glove is not only depending on the material, but also on quality characteristics and can differ from manufacturer to manufacturer.

The durability of glove materials can not be pre-estimated for preparations and therefore has to be verified before use. The exact breakthrough time of the glove material can be received from the manufacturer and has to be observed.

9. Physical and chemical properties

Physical state:	Liquid.
Colour:	Yellow, brown
Odour:	Characteristic
Boiling point / Boiling range:	>= 360 °C
Flashpoint:	> 180 °C DIN ISO 2592
Ignition Temperature:	> 250°C ASTM E 659
Lower explosion limit:	In case of formation of oil sprays, ~ 0.6 Vol%
Upper explosion limit:	In case of formation of oil sprays, ~ 6.5 Vol%
Vapour pressure:	1013 mbar@360°C
Relative Density (kg/m ³):	878 by 15 °C DIN 51757
Water solubility (g/l):	Insoluble
Partition coefficient n-octanol /water (log p _{OW}):	n.d.a
Vapour density (air = 1):	Vapours, heavier than air
Viscosity:	46 mm ² /s by 40 °C DIN 51562

10. Stability and Reactivity

10.1 Conditions to avoid

See Item 7.

If product is stored and handled as prescribed not to be expected (stable).

Decomposition: >= ~ 200 °C

> 180°C: Formation of ignitable vapour/air mixtures possible.

10.2 Materials to avoid

See also Item 7.

Avoid contact with strong oxidizing agents.

10.3 Hazardous decomposition products

See Item 5.3

11. Toxicological information

11.1 Acute toxicity and immediately occurring effects

11.1.1 Ingestion, LD50 rat oral (mg/kg):	n.d.a.
11.1.2 Inhalating, LC50 rat inhalative (mg/l/4h):	n.d.a.
11.1.3 Skin contact, LD50 rat dermal (mg/kg):	n.d.a.
11.1.4 Eye contact:	n.d.a.

11.2 Delayed occurring and chronic effects

11.2.1 Sensitizing effects:	n.d.a.
11.2.2 Carcinogenic effects:	n.d.a.
11.2.3 Mutagenic effects:	n.d.a.
11.2.4 Reproductive effects:	n.d.a.
11.2.5 Narcotic effects:	n.d.a.

11.3 Other information

It can occur:

Eye irritation

In case of prolonged exposure:

Skin dehydration

Skin irritation

Dermatitis

12. Ecological information

Water hazard class (WGK):	1
Self classification:	Yes (VwVwS)

13. Disposal considerations

13.1 For the substance / preparation / remaining quantities

Saturated contaminated cloth, paper or other organic material pose a fire danger and have to be collected and disposed controlled.

Waste code EC:

The named waste codes are proposals because of the likely use of this product.

Due to specific use and disposal circumstances at the user other waste codes may be suitable.

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

Recommendation:

Send to a facility for oil re-refining in compliance with official regulations (EC-Directive 75/439/EEC).

Observe official regulations.

13.2 For contaminated packages

See item 13.1

Observe official regulations.

Non-contaminated packages can be reused.

Packages that cannot be cleaned have to be disposed like the product.

14. Transport information

General information

UN-No.:	n.a.
Road / rail transport (GGVSE/ADR/RID)	
Class / packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.

Marine transport

GGVSee / IMDG-Code:	n.a.
EmS-No.:	n.a. (class / packing group)
Marine Pollutant:	n.a.

Air transport

IATA:	n.a. (class / tributary danger/ packing group)
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Further information

No hazardous material as defined by the above mentioned transport regulations.

15. Regulatory information

Labelling according to Gefahrstoff-V incl. EC-Directives (67/548/EEC und 1999/45/EC)

Hazardous symbols:	n.a.
Hazardous indications:	---
R-phrases:	

S-phrases:

Voluntary:

S13 Keep away from food, drink and animal feeding stuffs.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additions: n.a.

Observe restrictions: n.a.

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Additions: n.a.

Observe restrictions: n.a.

16. Other information

These information refer to the product in delivery condition.

Storage class acc. to VCI:	10
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Revised particulars:	7.
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Legend

n.a. = not applicable / n.a.v. = not available / n.p. = not proven / n.d.a. = no data available

MAK = Maximale Arbeitsplatzkonzentration / TRK = Technische Richtkonzentration /

BAT = Biologische Arbeitsplatztoleranz

VbF = Verordnung über brennbare Flüssigkeiten / TRbF = Technische Regeln brennbare Flüssigkeiten

Water hazard class (WGK):

WGK3 = extremely water hazardous, WGK2 = water hazardous, WGK1 = slightly water hazardous

VOC-CH = Volatile organic compounds

AOX = adsorbable organic halogen compounds

The information herein are to describe the product with regard to the required safety precautions, they do not intend to assure certain properties and are based upon today's standard of knowledge.

Liability excluded.