according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 1/(12)

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

1.1 Product identifier:

MOL Hydro HVLP 46 hydraulic oil

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

Relevant identified uses: hydraulic oil

Uses advised against: no data

1.3 Details of the supplier of the safety data sheet:

MOL-LUB Lubricant Production Distribution and Service Ltd.

H-2931 Almásfüzitő, Fő út 21., Hungary

Phone / Fax: +36 34 526 330 / +36 34 526 391

E-mail: kenoanyag@mol.hu

Request SDS of:

MOL-LUB Lubricant Production Distribution and Service Ltd.

Customer Service Center

H-2931 Almásfüzitő, Fő út 21., Hungary

Phone / Fax: +36 80 201 296 / +36 34 348 010

Responsible for SDS:

MOL-LUB Ltd.

Phone: +36 34 526 343; Mobile: +36 20 474 2644

E-mail: csahorvath@mol.hu

1.4 Emergency telephone number

Toxicology Emergency Information Service

Adress: 194044, Russia. St. Petersburg, Botkinskaya Str. 17

Phone: +7(812) 542-86-71

SECTION 2 Hazards identification

2.1 Classification of the <u>mixture</u> or substance

Hazard Class and Category: Hazard statement:

Not classified.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 2/(12)

2.2 Label elements

Product identification: Trade name: MOL Hydro HVLP 46 hydraulic oil

Hazardous components: -

GHS Pictogram: not required Signal word: not required

Hazard statement: **not required**

Supplemental hazard information: -

Precautionary statements - General: -

Precautionary statements – Prevention:

P273 Avoid release to the environment.

Precautionary statements – Response: -

Precautionary statements - Storage: -

Precautionary statements – Disposal:

P501 Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: Not required. Transport classification: see section 14.

2.3 Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 3/(12)

SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixture of refined mineral base oils containing additives.

Component(s) / Hazardous component(s):

Name	EU	CAS	Hazard classes and	Hazard	Conc.
	number	number	cat.	statements	%(m/m)
Lubricating oils	309-877-7	101316-72-7	-	-	max. 60
(petroleum), C24-C50*			(Note L)		
REACH Registr. Nr.:					
01-2119489969-06					
Lubricating oils	305-594-8	94733-15-0	Asp.Tox.1	H304	max. 40
(petroleum), C18-40*			(Note L)		
REACH Registr.Nr.:					
01-2119486987-11					
Distillates (petroleum),	295-301-9	91995-40-3	Asp.Tox.1	H304	max. 40
dewaxed light			(Note L)		
paraffinic, hydrotreated					
REACH Registr.Nr.:					
01-2119488517-24					
Lubricating oils	305-594-8	94733-15-0	=	=	max. 10
(petroleum), C18-C40*			(Note L)		
REACH Registr. Nr.:					
01-2119486987-11					
Zinc alkyl	272-028-3	68649-42-3	Eye Dam. 1	H318	max. 0.3
dithiophospate			Aquatic Chronic. 2	H411	

^{*:} with exposure limit

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never

induce vomiting.

Inhalation: Remove the affected person to fresh air. If rapid recovery does not occur, obtain

medical attention.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 4/(12)

Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use

soap. In case of persistent irritation, get medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. In case of persistent

irritation, get medical attention.

Ingestion: If swallowed, give water. Do not induce vomiting. Get medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

Prolonged and/or repeated contact may cause irritation on skin or in eyes depending on individual sensitivity.

4.3 Indication of any immediate medical attention and special treatment need Not required.

SECTION 5 Fire-fighting measures

Fire hazards:

Combustible.

5.1 Extinguishing media

Suitable extinguishing media:

Foam, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:

Water jet.

5.2 Special hazards arising from the <u>mixture</u> or substance

Hazardous combustion products:

On burning, carbon dioxide, carbon monoxide, sulphur oxides, phosphor oxides, various hydrocarbons and soot can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Respiratory protection.

Further information:

Collect contaminated fire fighting water separately. It must not enter the sewage system. Contaminated extinguishing water must be disposed of in accordance with official regulations.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 5/(12)

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Personal precautions: see Section 8.

6.2 Environmental precautions:

Confine spills to prevent material from entering sewers, watercourses, drains and into soil Notify relevant authority.

6.3 Methods and material for containment and cleaning up

On soil: All kind of ignition sources should be remove. Recover free liquid by

pumping. Contain the rest or small quantities with sand, earth or other

suitable absorbents. Dispose of according to local regulations.

On water: Confine the spillage. Remove from surface by skimming or suitable

absorbents. Notify local authorities according to regulations.

6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants and flammable liquids. Keep away from radiant heat and open flame.

Avoid contact with skin and eyes. Avoid prolonged breathing of oil vapours or mists.

Ensure washing facilities after working hours and before breaks. Take off contaminated or oil-soaked clothing, wash with warm water and soap.

When using do not eat, drink or smoke. Avoid splashing the product.

Handling temperature: not known

7.2 Conditions for safe storage, including any incompatibilities

Storage facilities must comply with regulations for storing of flammable liquids.

Store in dry, well ventilated place in original, closed containers.

Keep away from radiant heat, open flame and strong oxidizing agents.

Storage temperature: max. 40°C

7.3 Specific end use(s)

Hydraulic oil.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 6/(12)

SECTION 8 Exposure controls / personal protection

Engineering control measures:

Not required.

8.1 Control parameters:

Mineral oil mist: TWA: 5 mg/m³; STEL: 10 mg/m³, for oil mist, vapour

excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

8.2 Exposure controls

Personal protection:

Respiratory protection: Breathing apparatus not required.

Hand protection: Oil resistant gloves (EN 374, Breakthrough time 480 min) (e.g.

nitrile rubber – minimal thickness 0.33 mm).

Note: Manufacturer's directions for use and the conditions of

application should be observed.

Eye protection: Protective goggles not required. Skin protection: Protective clothing (oil resistant).

Other special: No data.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid

Colour: yellow, clear Odour: characteristic

Change in physical state:

Pour point (ISO 3016): typ. -42°C Boiling point (DIN 51356): not available

Others:

Flash point (COC) (EN ISO 2592): typ. 220°C Ignition point (EN ISO 2592): not available Autoignition temperature: not available Explosive properties: not explosive Oxidizing properties: not oxidize

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 7/(12)

Vapour pressure at 20°C: negligible

Density at 15°C (EN ISO 12185): 0.860-0.880 g/cm³

Solubility in water: practically insoluble in water Solubility in other solvents: gasoline, kerosene, toluene, etc.

n-Octanol/water partition coefficient:

Vapour density:

Heating value:

Kinematic viscosity at 40°C (EN ISO 3104):

Kinematic viscosity at 100°C (EN ISO 3104):

pH:

not available

not available

typ. 45 mm²/s

typ. 7,8 mm²/s

not applicable

Other information

no data available

SECTION 10 Stability and reactivity

10.1 Reactivity: Dangerous reactivity not known.

10.2 Chemical stability: No decomposition if stored and handled properly.

10.3 Possibility of hazardous

9.2

reactions: Not known.

10.4 Conditions to avoid: Direct heat or ignition sources.

10.5 Incompatible materials: Strong oxidizing agents.

10.6 Hazardous decomposition No dangerous decomposition products are formed under normal

products: conditions. Hazardous combustion products: See Section 5.

SECTION 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Oral: LD_{50} (rat) > 2000 mg/kg (based on components) Dermal: LD_{50} (rabbit) > 2000 mg/kg (based on components)

Acute toxicity: irritation

Skin: not irritant (based on components)

Eye: not irritant (based on components), causes serious eye irritation

Note: Prolonged and/or repeated contact may cause irritation on skin or in eyes

depending on individual sensitivity.

Respiratory or skin sensitisation: not sensitising (based on components)

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 8/(12)

Other information, specific effects:

The product does not contain PCBs, PCTs, and other chlorine compounds, and heavy metals, barium compounds.

Note L: The classification as a carcinogen need not apply according to 1272/2008/EC, because it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

Germ cell mutagenicity: not known, resp. not mutagen (based on components)
Carcinogenicity: not known, resp. not carcinogen (based on components)
Reproductive toxicity: not known, resp. no reproduction-damaging effect

(based on components)

STOT-single exposure: not classified STOT-repeated exposure: not classified Aspiration hazard: not classified

SECTION 12 Ecological information

12.1 Toxicity No data for the product.

Aquatic organisms: Soil organisms:

Plants:

12.2 Persistence and degradability
Biodegradability:
No data available.
No data available.

12.3 Bioaccumulative potential No data available.

12.4 Mobility

Mobility in soil Absorbs in soil. Mobility in water: Floats on water.

12.5 Results of PBT and vPvB

assessment Does not contain PBT and vPvB substances.

12.6 Other adverse effects

Heavy metal content: None.

PCT, PCB and other chlorinated

hydrocarbons: None.

Environmental effects: Spills may form a film on water surfaces causing

impaired oxygen transfer.

Water hazard class (German): WGK 1 (Classification by VwVwS)

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 9/(12)

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.

Waste Identification Code: 13 02 05*

Mineral-based non-chlorinated engine, gear and lubricating oils.

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: incineration

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

Waste Identification Code: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

SECTION 14 Transport information

Land transport:

Road/ Railway ADR/RID: Not classified.

14.1. UN number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

14.5. Environmental hazards:

14.6. Special precautions for user:

Waterways:

Inland waterways/ Sea transport ADN/IMDG: Not apply to the product.

Air transport: ICAO / IATA: Not apply to the product.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 10/(12)

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the mixture. This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (applicable version) and to Regulation (EC) 1272/2008.

15.2 Chemical safety assessment. not available

SECTION 16 Other information

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.

The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Source of data presented in this material safety data sheet:

Test results of this product

Material safety data sheets of product's components 1272/2008/EC regulation, Annex XVII. of REACH

Relevant Hungarian regulation and EU directives

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC (CLP)

Not classified. -

The full text of each relevant Hazard classes and cat., H- phrase in Section 3.:

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil

Version: 2 Latest revision: 30. 11. 2017 Date of issue: 08. 12. 2015 Page: 11/(12)

Asp.Tox.1 Aspiration hazard Category 1

Eye Dam. 1 Serious eye damage/eye irritation Category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, Chronic Category 2

Legend:

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE Acute Toxicity Estimate
BCF Biocontrentration Factor
BOD Biological Oxigen Demand

Bw Body Weight

C&L Classification and Labeling CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging
CMR Carcigonic, Mutagenic or toxic to Reproduction

COD Chemical Oxygen Demand
CSA Chemical Safety Assessment
CSR Chemical Safety Report

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
ECHA European Cheamicals Agency
Ecx Effective Concentration x%

Edx Effective Dose x%

ELINCS European List of Notified Chemical Substances EC50 EC50 in terms of reduction of growth rate;

ES Exposure Scenario

ESIS European Chemical Substances Information System IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods

LCx Lethal Concentration x%

LDx Lethal Dose x%

LOAEC Lowest Observed Adverse Effect Concentration

LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level NOEC No observed effect concentration

NOEL No observed effect level NLP No-Longer Polymer

NOAEL No Observed Adverse Effect Level

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: MOL Hydro HVLP 46 hydraulic oil Version: 2 Latest revision: 30. 11. 2017 Date of is

Date of issue: 08. 12. 2015 Page: 12/(12)

OECD	Organisation for Economic Cooperation and Development				
PBT	Persistent Bioaccumulative and Toxic				
PNEC	Predicted No-Effect Concentration				
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals				
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail				
SVHC	Substance of Very High Concern				
UVCB	substance of unknown or variable composition, complex reaction products or biological materials				
VOC	Volatile organic compounds				
vPvB	Very Persistent and very Bio-accumulative				

Revision Indicators:

Section	Subject of change	Date	Version
3 1-16	Composition/information on ingredients Other corrections, revision modification according to 2015/830 /EC	30.11.2017	2