

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21, 10, 2015 Date of issue: 20, 06, 2007 Page: 1/(13)

Section 1 Identification of the mixture and of the company/undertaking

Product identifier: 1.1

1.3

MOL Hydro HME 22 premium hydraulic oil

Relevant identified uses of the mixture and uses advised against

Relevant identified uses: premium hydraulic oil

Uses advised against: no data

Details of the supplier of the safety data sheet:

MOL-LUB Lubricant Production Trade and Service Limited Liability Company

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 Trade and Service Limited Liability Company

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. Csaba Horváth, head of SD, HSE & Business Support

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

e-mail: csahorvath@mol.hu

Emergency telephone number

Emergency telephone (07-15²⁰ h): +36 34 526 210 (CET) on workdays

Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)

Tel.: +36 1 476 6464, or +36 80 201 199

National Health Toxicological Information Service:



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 2/(13)

Section 2 Hazards identification

2.1 Classification of the mixture

Hazard Class and Category: Hazard statement:

Not classified.

2.2 Label elements 1272/2008/EC

Product identification:

Trade name: MOL Hydro HME 22 premium 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.



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 3/(13)

2.3 Other hazards

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

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 (petroleum), C18-40* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	Asp.Tox.1 (Note L)	H304	
Lubricating oils (petroleum), C24- C50* REACH Registr.Nr.: 01-2119489969-06	309-877-7	101316-72-7	Asp.Tox.1 (Note L)	H304	max. 99
Lubricating oils (petroleum), C18-40* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	(Note L)	-	max. 25
Zinc dialkyl dithiophospate REACH Regist. Nr.: 01-2119493635-27	272-028-3	68649-42-3	Eye Dam. 1 Aquatic Chronic 2	H318 H411	max. 0.5
Alkylated phenol		confidential	Skin Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1	H315 H400 H410	max. 0.2

^{*:} with exposure limit

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



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 4/(13)

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.

Skin Wash skin with large amounts of water, use soap. In case of persistent

contact: 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

No data available.

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.



according to regulation 1907/2006/EC (REACH) and 1272/2008/EC MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21, 10, 2015 Date of issue: 20, 06, 2007 Page: 5/(13)

5.2 Special hazards arising from the mixture

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.

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.

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.

Methods and material for containment and cleaning up 6.3

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

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

suitable absorbents. Dispose of according to local regulations.

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

absorbents. Notify local authorities according to regulations.

Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 6/(13)

Section 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants.

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:

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)

Premium hydraulic oil.

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.



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21, 10, 2015 Date of issue: 20, 06, 2007 Page: 7/(13)

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. -36°C Boiling point (DIN 51356): not available

Others:

Flash point (COC) (EN ISO 2592): typ. 200°C Ignition point (EN ISO 2592): not available Autoignition temperature: not available Explosive properties: not explosive Oxidizing properties: not oxidize Vapour pressure at 20°C: negligible

Density at 15°C (EN ISO 12185): $0.856-0.870 \text{ g/cm}^3$

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

n-Octanol/water partition coefficient: not available Vapour density: not available inf. 38 000 kJ/kg Heating value: typ. $22.5 \text{ mm}^2/\text{s}^2$ Kinematic viscosity at 40°C (EN ISO 3104): Kinematic viscosity at 100°C (EN ISO 3104): typ. 4.35 mm²/s pH:

not applicable

9.2 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

reactions: Not known.

10.4 Conditions to avoid: Direct heat or ignition sources.

10.5 Incompatible materials: Strong oxidizing agents.

No dangerous decomposition products are formed under normal 10.6 Hazardous decomposition

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



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 8/(13)

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)

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)

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 known STOT-repeated exposure: not known hazard: not known not known

Section 12 Ecological information

12.1 Toxicity Not available.

Aquatic organisms:

Soil organisms:

Plants:

12.2 Persistence and degradability No data available.

Biodegradability: No data available.



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 9/(13)

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 Does not contain PBT and vPvB substances.

assessment

12.6 Other adverse effects

Heavy metal content: None. PCT, PCB and other chlorinated None.

hydrocarbons:

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

impaired oxygen transfer.

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

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 01 10*

Mineral based non-chlorinated hydraulic oils.

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.



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 10/(13)

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.

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.





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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 11/(13)

Source of data presented in this material safety data sheet:

Test results of this product

Material safety data sheets of product's components

Hungarian and EU lists of dangerous substances

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 H- phrase and Hazard classes and cat. in Section 3.:

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

Asp.Tox.1 Aspiration hazard Category 1

Skin Irrit. 2 Skin corrosion/irritation Category 2

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

Aquatic Acute 1 Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, Chronic Category 1
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



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

MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21, 10, 2015 Date of issue: 20, 06, 2007 Page: 12/(13)

COD Chemical Oxygen Demand **CSA** Chemical Safety Assessment **CSR** Chemical Safety Report **DMEL** Derived Minimal Effect Level Derived No Effect Level **DNEL ECHA** European Cheamicals Agency Effective Concentration x% Ecx Edx Effective Dose x%

ELINCS European List of Notified Chemical Substances EC50 in terms of reduction of growth rate; ErC50

ES Exposure Scenario

ESIS European Chemical Substances Information System **IARC** International Agency for Research on Cancer International Air Transport Association **IATA 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

Lowest Observed Effect Level LOEL **NOEC** No observed effect concentration No observed effect level NOEL

NLP No-Longer Polymer

No Observed Adverse Effect Level **NOAEL**

Organisation for Economic Cooperation and Development OECD

Persistent Bioaccumulative and Toxic **PBT 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	Composition / information on ingredients	13.10.2010	2
1-16	Regulatory information, other corrections		
3	Composition/information on ingredients	04.08.2011	3
1-16	Regulatory information, other corrections		
	Revision modification according to 453/2010/EC		



according to regulation 1907/2006/EC (REACH) and 1272/2008/EC $\,$ MOL-LUB Ltd.

Trade name: MOL Hydro HME 22 premium hydraulic oil

Version: 5 Latest revision: 21. 10. 2015 Date of issue: 20. 06. 2007 Page: 13/(13)

Revision Indicators:					
Section	Subject of change	Date	Version		
3	Composition/information on ingredients	10.07.2012	4		
9	Physical and chemical properties				
1-16	Revision modification according to 1272/2008/EC				
1	Details of the supplier of the safety data sheet, Responsible	21.10.2015	5		
	for SDS				
3	Composition/information on ingredients				
9	Physical and chemical properties				
1-16	Other corrections, revision modification according to				
	2015/830 /EU				