



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 1/(12)

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

1.1 Product identifier:

MOL Hydro HV 22 multigrade hydraulic oil

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

Relevant identified uses: multigrade 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. Csaba Horváth, head of SD, HSE & Business Support

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

e-mail: csahorvath@mol.hu

1.4 Emergency telephone number

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

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

Tel.: 36 80 201 199 (0-24 h, free number).

National Health Toxicological Information Service:

SECTION 2 Hazards identification

2.1 Classification of the mixture or substance

Hazard Class and Category: Hazard statement:

Not classified.

-



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 2/(12)

2.2 Label elements

Product identification: Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Hazardous component(s): -

GHS Pictogram: Not required.

Signal word: Not required.

Hazard statement:

Not required.

Supplemental hazard information:

EUH210 Safety data sheet available on request.

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.

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 number | CAS number | Hazard classes and cat. | Hazard statements | Conc. % (m/m) |
|--|-----------|------------|-------------------------|-------------------|---------------|
| Lubricating oils (petroleum), C18- C40* REACH Registr. Nr.: 01-2119486987-11 | 305-594-8 | 94733-15-0 | Asp. Tox. 1 (Note L) | H304 | max. 70 |



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 3/(12)

| Name | EU number | CAS number | Hazard classes and cat. | Hazard statements | Conc. % (m/m) |
|--|-----------|------------|---|----------------------------------|---------------|
| Distillates (petroleum), hydrotreated heavy paraffinic, C20-C50* REACH Registr. Nr.: 01-2119484627-25 | 265-157-1 | 64742-54-7 | - (Note L) | - | max. 50 |
| Distillates (petroleum), dewaxed light paraffinic, hydrotreated REACH Registr. Nr.: 01-2119488517-24 | 295-301-9 | 91995-40-3 | Asp.Tox.1 (Note L) | H304 | max. 35 |
| Distillates (petroleum), C15- C30* REACH Registr. Nr.: 01-2119480375-34 | 265-156-6 | 64742-53-6 | Asp. Tox. 1 (Note L) | H304 | max. 32 |
| Zinc dialkyl dithio-phosphate REACH Registr. Nr.: 01-2119493635-27 | 272-028-3 | 68649-42-3 | Eye Dam. 1 Aquatic Chronic 2 | H318 H411 | max. 0.6 |
| Alkyl phenol REACH Registr. Nr.: 01-2119490822-33 | 204-884-0 | 128-39-2 | Skin Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1 | H315 H400 (M=1) H410 (M=1) | max. 0.2 |

*: 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.

Skin contact: 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.



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5

Latest revision: 02. 05. 2018

Date of issue: 20. 06. 2007

Page: 4/(12)

- 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 mixture or substance

Hazardous combustion products:

On burning, carbon monoxide, carbon dioxide, 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.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Danger of slipping on leaked out/spilled product.

6.2 Environmental precautions:

Confine spills to prevent material from entering sewers, watercourses, drains and into soil

Notify relevant authority.



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 5/(12)

6.3 Methods and material for containment and cleaning up

- On soil: All kind of ignition sources should be remove. Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid by pumping. 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.
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)

- Multigrade 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



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5

Latest revision: 02. 05. 2018

Date of issue: 20. 06. 2007

Page: 6/(12)

8.2 Exposure controls

Personal protection:

Respiratory protection: Under normal conditions not required. In case of exceeded exposure-limits respiratory protection with particle-filter is recommended.

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: Where splashing is possible, wear safety glasses (EN 166).

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, bright
Odour: characteristic

Change in physical state:

| Boiling point(ISO 2176): | not available
Pour point (ISO 3016): typ. -48°C

Others:

Flash point (COC) (EN ISO 2592): typ. 185°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): 0.860 – 0.880g/cm³
Solubility in water: practically insoluble in water
Solubility in other solvents: gasoline, kerosene, toluene, etc.



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5

Latest revision: 02. 05. 2018

Date of issue: 20. 06. 2007

Page: 7/(12)

| | |
|---|------------------------------|
| n-Octanol/water partition coefficient: | not available |
| Vapour density: | not available |
| Heating value: | inf. 38 000 kJ/kg |
| Kinematic viscosity at 40°C (EN ISO 3104): | typ. 21.6 mm ² /s |
| Kinematic viscosity at 100°C (EN ISO 3104): | typ. 4.85 mm ² /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.
- 10.6 Hazardous decomposition products: No dangerous decomposition products are formed under normal 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) |

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



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5

Latest revision: 02. 05. 2018

Date of issue: 20. 06. 2007

Page: 8/(12)

Other information, specific effects:

NOTE L: The base oil(s) contain(s) less than 3% DMSO extract (IP 346), therefore not classified as carcinogenic material according to 1272/2008/EC.

| | |
|-------------------------|--|
| 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 | Not available. |
| Aquatic organisms: | |
| Soil organisms: | |
| Plants: | |
| 12.2 Persistence and degradability | No data available. |
| Biodegradability: | 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) |



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5

Latest revision: 02. 05. 2018

Date of issue: 20. 06. 2007

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 01 10* or 13 02 05*

Mineral based non-chlorinated hydraulic oils.

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

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.

Recommended waste treatment method: incineration

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.



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 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 (mod.: 2015/830/EU) 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 and EU regulations

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



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 11/(12)

| | |
|-------------------|--|
| 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 |
| 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 | Bioconcentration Factor |
| BOD | Biological Oxygen Demand |
| Bw | Body Weight |
| C&L | Classification and Labeling |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| CMR | Carcinogenic, 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 Chemicals Agency |
| Ec _x | Effective Concentration x% |
| Ed _x | Effective Dose x% |
| ELINCS | European List of Notified Chemical Substances |
| ErC50 | 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 |
| LC _x | Lethal Concentration x% |
| LD _x | 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 |



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

MOL-LUB Ltd.

Trade name: **MOL Hydro HV 22 multigrade hydraulic oil**

Version: 5 Latest revision: 02. 05. 2018 Date of issue: 20. 06. 2007 Page: 12/(12)

| | |
|-------|---|
| NOEL | No observed effect level |
| NLP | No-Longer Polymer |
| NOAEL | No Observed Adverse Effect Level |
| 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 Revision modification according to 1272/2008/EC | 31.08.2011 | 2 |
| 3 9 1-16 | Composition/information on ingredients Physical and chemical properties Regulatory information, other corrections | 25.04.2014 | 3 |
| 1 3 9 1-16 | Details of the supplier of the safety data sheet, Responsible for SDS Composition/information on ingredients Physical and chemical properties Other corrections, revision modification according to 2015/830 /EU | 21.10.2015 | 4 |
| 2.2, 14 2.2 3 1-16 | Regulatory information Label elements Composition/information on ingredients Other corrections | 02.05.2018 | 5 |