SAFETY DATA SHEET

(1907/2006/EC)

MOL-LUB Ltd.

Trade name: MOL Hykomol Synt 75W-90 semi-synthetic gear oil

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 1/(9)

1. Identification of the substance / preparation and company

Product name:

MOL Hykomol Synt 75W-90

Product type / recommended uses:

preparation / semi-synthetic gear oil

Manufacturer / Supplier identification:

MOL-LUB Lubricant Production Trade and Service Limited Liability Company

H-2931 Almásfüzitő, Fő u. 21., Hungary

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

Request SDS of:

MOL-LUB Lubricant Production Trade and Service Limited Liability Company

Customer Service Center

H-2931 Almásfüzitő, Fő u. 21., Hungary

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

Responsible for SDS:

MOL-LUB Ltd. Csaba Horváth, head of HSE and QOP

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

e-mail: csahorvath@mol.hu

Technical information:

MOL-LUB Ltd. Product Development and Technical Service

H-1117 Budapest, Október huszonharmadika u. 18., Hungary

Phone/Fax: +36 80 201 296 or +36 1 464 0236 / +36 1 464 0304

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

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

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

2. Hazards identification

Human health hazards: Danger symbol not required.

Note: Prolonged and/or repeated contact may cause irritation and/or

skin sensibilization, depending on individual sensitivity (see also

Protective equipment).

Safety hazards: Danger symbol not required.

Environmental hazards: Danger symbol not required.

Note: Spills may form a film on water surfaces causing impaired oxygen

transfer.

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 2/(9)

3. Composition / information on ingredients

Chemical description: Mixture of synthetic oils and refined mineral base oils containing

additives.

Ingredients / Hazardous components:

Name	EINECS number	CAS number	Hazard symbol	Risk phrase	Conc. %(m/m)
Lubricating oils (petroleum), C24-C50*	309-877-7	101316-72-7	- (Note L)	-	max. 15
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50*	265-157-1	64742-54-7	(Note L)	-	max. 25
Synthetic base oil (polyalphaolefin)	500-183-1	68037-01-4	-	-	max. 35
Lubricating oils (petroleum), C>25*	309-874-0	101316-69-2	- (Note L)	-	max. 10
Distillates (petroleum), C20-C50*	265-090-8	64741-88-4	- (Note L)	-	1.5
Distillates (petroleum), C20-C50*	265-169-7	64742-65-0	- (Note L)	-	max. 15
Dodecyl methacrylate	205-570-6	142-90-5	Xi, N	R 36/37/38, R 50/53	max. 0.15
Long-chain alkyl amine	confidential		T, C, Xn, N	R 23/24, R 22, R 48/20, R 34, R 43, R 50/53	max. 0.2
Long-chain alkenyl amine	confidential		C, Xn, N	R 22, R 35, R 50	max. 0.2

^{*:} with exposure limit

The full text of each relevant R phrase see in Section 16.

4. 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. Remove contaminated

clothing. 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.

Note to physician:

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 3/(9)

5. Fire-fighting measures

Fire hazards:

Moderately hazardous (see also Section 9 - flash point).

Suitable extinguishing media:

Foam, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:

Water jet.

Hazardous decomposition products:

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

Special protective equipment:

According to the existing fire-fighting regulations.

Further information:

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6. Accidental release measures

Personal precautions:

See Section 8.

Environmental precautions:

Prevent spills from entering into natural water, soil and drains by containing the liquid. Notify relevant authority.

Clean-up procedures / recovery

On soil: 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.

7. Handling and storage

Handling:

Keep general measures applied for normal operations with lubricants.

Keep away from radiant heat and open flame.

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

Handling temperature:

Storage:

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

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 4/(9)

Specific application:

See product sheet.

8. Exposure controls / personal protection

Engineering control measures:

Not required.

Exposure limits:

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

excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

Personal protection:

Respiratory protection: Breathing apparatus not required.

Hand protection: Oil resistant gloves (EN 374, Breakthrough time 480 min;

Permeation performance level: 6) (e.g. nitrile rubber -

minimal thickness 0.33 mm).

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

Other special:

General protective measures / hygiene:

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.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

9. Physical and chemical properties

Appearance:

Physical state: liquid

Colour: light-brown, clear Odour: characteristic

Change in physical state:

Pour point (ISO 3016): typ. -45°C

Boiling point:

Others:

Flash point (COC) (EN ISO 2592): typ. 215°C Ignition point (EN ISO 2592): not available Autoignition temperature: not available Explosive properties: not explosive

Oxidizing properties:

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 5/(9)

Vapour pressure at 20°C: negligible

Density at 15°C (EN ISO 12185): typ. 0.870 g/cm³

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

n-Octanol/water partition coefficient:

Vapour density:

Evaporation rate:

Heating value:

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

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

pH:

not available

not available

inf. 38 000 kJ/kg

typ. 111.4 mm²/s

typ. 15.5 mm²/s

not applicable

10. Stability and reactivity

Stability: No decomposition if stored and handled properly.

Conditions to avoid: Direct heat or ignition sources.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition On burning, carbon monoxide, carbon dioxide, nitrogen oxides,

Hazardous decomposition products:

various hydrocarbons and soot can be formed.

1

Notes:

11. Toxicological information

Acute toxicity:

 $\begin{array}{lll} \text{Oral:} & \text{LD}_{50} \ (\text{rat}) & > 2000 & \text{mg/kg} & (\text{based on components}) \\ \text{Dermal:} & \text{LD}_{50} \ (\text{rabbit}) & > 2000 & \text{mg/kg} & (\text{based on components}) \\ \end{array}$

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 (see also Protective

equipment).

Sensitization: not sensitising (based on components), but may produce an allergic

reaction

Chronic toxicity: not known

Other information, specific effects:

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

The base oil(s) contain(s) less than 3% DMSO extract (IP 346), therefore not classified as carcinogenic material according to 67/548/EEC NOTE L.

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 6/(9)

Carcinogen effect: not known, resp. not carcinogen (based on

components)

Mutagen effect: not known, resp. not mutagen (based on components)

Reproduction-damaging effect: not known, resp. no reproduction-damaging effect

(based on components)

12. Ecological information

Mobility: Floats on water. Absorbs on soil.

Degradability / persistence:

Biodegradability:

Bioaccumulative potential:

Ecotoxicity: Not available.

Aquatic organisms: Soil organisms:

Plants:

Biological oxygen demand: Chemical oxygen demand:

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):

13. Disposal considerations

Product disposal:

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

EWC cod: 13 02 05*

Mineral-based non-chlorinated engine, gear and lubricating oils. Disposal must be in compliance with national and local regulations.

Packaging disposal:

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

EWC cod: 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.

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 7/(9)

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.

14. Transport information

Land transport:

Road/ Railway ADR/RID: Not classified.

Waterways:

Inland waterways/ Sea transport ADN/IMDG: Not classified.

Air transport: ICAO / IATA: Not classified.

15. Regulatory information

Classification and labelling according to EU directives [67/548/EEC 1999/45/EC (existing versions)] and to Hungarian regulation [44/2000. (XII. 27.) EüM rendelet (existing version)] for hazardous substances and hazardous preparations:

Danger symbol(s) and indication(s):

Not required.

Hazardous substance(s):

The packaging must bear the inscription: Contains Long-chain alkyl amine. May produce an

allergic reaction.

R-phrases: not required

S-phrases: S 24 Avoid contact with skin

S 60 This material and its container must be disposed of as hazardous

waste

S 61 Avoid release to the environment. Refer to special

instructions/Safety data sheets

Tactile warning of danger: Not required.

16. Other information

Recommended application / restrictions:

See product sheets.

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 8/(9)

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.

This safety data sheet has been prepared according to Regulation (EC) No 1907/2006, Directives 1999/45/EC.

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

CONCAWE database

The full text of each relevant R phrase in Section 3.:

R 22	Harmful if swallowed
R 23/24	Toxic by inhalation and in contact with skin
R 34	Causes burns
R 35	Causes severe burns
R 36/37/38	Irritating to eyes, respiratory system and skin
R 43	May cause sensitisation by skin contact
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through
	inhalation
R 50	Very toxic to aquatic organisms
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the

Version: 4 Latest revision: 24. 03. 2010 Date of issue: 20. 06. 2007 Page: 9/(9)

Revision I	ndicators:		
Section	Subject of change	Date	Version
1-16	Other correction	21.01.2009	2
2	Hazards identification	28.10.2009	3
3	Composition / information on ingredients		
5	Fire-fighting measures		
7	Handling and storage		
9	Physical and chemical properties		
10	Stability and reactivity		
12	Ecological information		
15	Regulatory information		
16.	The full text of each relevant R phrase in Section 3. Other corrections		
3	Composition / information on ingredients	24.03.2010	4