MOL-LUB Ltd.

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

Trade name: MOL Hykomol Syntrans 75W-90 synthetic automotive gear oil

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

1.1 Product identifier:

MOL Hykomol Syntrans 75W-90 synthetic automotive gear oil

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: synthetic automotive gear oil

Uses advised against: no data

1.3 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

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 and HSE

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 utca 18., Hungary

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

1.4 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:

2. Hazards identification

2.1 Classification of the mixture

2.1.1 Classification of the mixture according to regulation 1272/2008/EC

Hazard Class and Category: Hazard statement:

Eye Irrit. 2 H319 Causes serious eye irritation.

Aqatic Chronic 3 H412 Harmful to aquatic life with long lasting

effects.

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2.1.2 Classification of the mixture according to regulation 1999/45/EC

Human health hazards: Danger symbol not required.

Note: Prolonged and/or repeated contact may cause irritation

on skin or in eyes depending on individual sensitivity, and/or skin sensibilization (See also Protective

equipment).

Safety hazards: Danger symbol not required.

Environmental hazards: Danger symbol not required.

R 52/53 Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

2.2 Label elements 1272/2008/EC

Product identification:

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GHS Pictogram:

(!)

Signal word: Warning

Hazard statement:

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Supplemental hazard information:

EUH208 Contains Amine phosphate. May produce an allergic reaction.

Precautionary statements – Prevention:

P280 Wear eye/face protection.

P273 Avoid release to the environment.

Precautionary statements – Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + **P313** If eye irritation persists: Get medical advice/attention.

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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

no data available

3. Composition/information on ingredients

3.1 Mixtures

Chemical description: Mixture of synthetic oils containing additives.

Component(s) / Hazardous component(s):

| Name | EU number | CAS number | Hazard symbol / Hazard classes and cat. | Risk phrase / Hazard statements | Conc. %(m/m) |
|-------------------------|--------------|---------------|---|---------------------------------------|-----------------|
| Alkyl amine, long chain | 273-279-1 | 68955-53-3 | 67/548/EEC: | | 0.1 - < 1 |
| № × ± | | | T, C, Xn, Xi, N | R 23/24, | |
| | | | | R 48/23 | |
| | | | | R 34, R 22, | |
| | | | | R 43, R 50/53 | |
| | | | 1272/2008/EC: | | |
| | | | Acute Tox. 3 | H331 | |
| | | | Acute Tox. 3 | H311 | |
| | | | STOT RE 1 | H372 | |
| | | | Skin Corr. 1B | H314 | |
| | | | Acute Tox. 4 | H302 | |
| | | | Skin Sens. 1 | H317 | |
| | | | Aquatic Acute 1 | H400 | |
| | | | Aquatic Chronic 1 | H410 | |
| Alkyl dithiophosphate | | confidential | 67/548/EEC: | | 0.1 - < 1 |
| × <u>*</u> | | | Xi, N | R 36, R50/53 | |
| | | | 1272/2008/EC: | | |
| | | | Eye Irrit. 2 | H319 | |
| | | | Aquatic Acute 1 | H400 | |
| | | | Aquatic Chronic 1 | H410 | |

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| Name | EU number | CAS number | Hazard symbol / Hazard classes and cat. | Risk phrase / Hazard statements | Conc. %(m/m) |
|-------------------|--------------|---------------|---|---------------------------------------|-----------------|
| Alkyl phosphonate | | confidential | 67/548/EEC: Xi, N | R 38, R41, | 0.1 – <1 |
| | | | 1272/2008/EC: | R 51/53 | |
| | | | Skin Irrit. 2 | H315 | |
| | | | Eye Dam. 1 | H318 | |
| | | | Aquatic Chronic 3 | H411 | |

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

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

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

Eye contact: Flush eyes with plenty of water for 10-15 minutes. Get medical attention.

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

4.2 Most important symptoms and effects, both acute and delayed Causes serious eye irritation.

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

5. Fire-fighting measures

Fire hazards:

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

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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

Hazardous combustion products:

On burning, carbon dioxide, carbon monoxide, 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.

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.

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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)

Synthetic automotive gear oil.

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

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Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid
Colour: bown, clear
Odour: characteristic

Change in physical state:

Pour point (ISO 3016): typ. -45°C Boiling point: 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 Vapour pressure at 20°C: negligible

Density at 15° C (EN ISO 12185): $0.845 - 8.59 \text{ g/cm}^3$

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. 96.5 mm²/s

typ. 96.5 mm²/s

not applicable

9.2 Other information

no data available

10. Stability and reactivity

10.1 Reactivity: Dangerous reactivity not known.

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

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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 No dangerous decomposition products are formed under normal

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

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)

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

on individual sensitivity.

Eye: irritant (based on components), causes serious eye irritation.

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

produce an allergic reaction

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 Aspiration hazard: not known

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12. Ecological information

12.1 **Toxicity** No data for the product.

Aquatic organisms:

Soil organisms:

Plants:

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

No data available. 12.3 Bioaccumulative potential

12.4 Mobility

Mobility in soil No data available. Mobility in water: No data available. Not required.

12.5 Results of PBT and vPvB

assessment

12.6 Other adverse effects

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

hydrocarbons:

Environmental effects: Harmful to aquatic life with long lasting effects.

Water hazard class (German): WGK 2

13. **Disposal considerations**

13.1 Waste treatment methods

Product disposal:

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

EWC cod: 13 02 06*

Synthetic 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.

EWC cod: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

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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.

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

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.: 453/2010/EC) and to Regulation (EC) 1272/2008.

15.2 Chemical safety assessment.

not available

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.

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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)

H410

Eye Irrit. 2 H319 calculation method Agatic Chronic 3 H412 calculation method

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

| R 22 | Harmful if swallowed. |
|---------|--|
| R 23/24 | Toxic by inhalation and in contact with skin. |
| R 34 | Causes burns |
| R 36 | Irritating to eyes. |
| R 43 | May cause sensitisation by skin contact. |
| R 48/23 | Toxic: danger of serious damage to health by prolonged exposure through inhalation. |
| R 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| | |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H331 | Toxic if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H372 | Causes damage to organs through prolonged or repeated exposure through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |

Very toxic to aquatic life with long lasting effects.

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| Acute Tox. 4 | Acute toxicity Category 4 |
|-------------------|---|
| Acute Tox. 3 | Acute toxicity Category 3 |
| Skin Corr. 1B | Skin corrosion/irritation Category 1B |
| Skin Sens. 1 | Respiratory/skin sensitization Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation Category 2 |
| STOT RE 1 | Specific target organ toxicity — repeated exposure Category 1 |
| Aquatic Acute 1 | Hazardous to the aquatic environment, Acute Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment, Chronic Category 1 |

Revision Indicators:

| Section | Subject of change | Date | Version |
|---------|--|------------|---------|
| 2 | Hazards identification | 27.06.2013 | 2 |
| 3 | Composition/information on ingredients | | |
| 9 | Physical and chemical properties | | |
| 12 | Ecological information | | |
| 1-16 | Revision modification according to 453/2010/EC and | | |
| | 1272/2008/EC | | |