

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 1/(14)

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

- 1.1 Product identifier: MOL Hykomol TDL 75W-90 synthetic automotive gear oil
- 1.2 Relevant identified uses of the <u>mixture</u> or substance 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 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, Nagyvárad tér 2.) Tel.: 36 80 201 199 (0-24 h, free number). National Health Toxicological Information Service:

SECTION 2 Hazards identification

 Classification of the <u>mixture</u> or substance Hazard Class and Category: Hazard statement: Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 2/(14)

2.2	Label elements
	Product identification: Trade name: MOL Hykomol TDL 75W-90 synthetic automotive gear oil
	Hazardous component(s): -
	GHS Pictogram:Not required.Signal word:Not required.
	Hazard statement: H412 Harmful to aquatic life with long lasting effects.
	Supplemental hazard information:EUH208ContainsReactionproductsofbis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), and Polysulfides, di-tert-Bu. May produce an allergic reaction.
	Precautionary statements – General: -
	Precautionary statements – Prevention:P273Avoid 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 (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 3/(14)

SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description:

Mixture of synthetic oils and refined mineral base oils containing additives.

Component(s) / Hazardous component(s):

		r			r
Name	EU	CAS	Hazard classes and	Hazard	Conc.
ivame	number	number	cat.	statements	%(m/m)
1-Decene, homopolymer,	500-183-1	68037-01-4	Asp. Tox. 1	H304	max. 60
hydrogenated					
Dec-1-ene, trimers,	500-393-3	157707-86-3	Asp. Tox. 1	H304	max. 60
hydrogenated			(L megjegyzés)		
Mineral oil raffinate*		confidential	-	-	max. 40
			(Note L)		
Polysulfides, di-tert-Bu**	273-103-3		Skin Sens. 1	H317	max. 4.9
REACH Regist. Nr.:			Aquatic Chronic 3	H412	
01-2119540515-43					
Reaction products of bis(4-	931-384-6		Flam. Liq. 3	H226	max. 4.9
methylpentan-2- yl)			Acute Tox. 4	H302	
dithiophosphoric acid			Skin Sens. 1	H317	
with phosphorous oxide,			Eye Dam. 1	H318	
propylene oxide and			Aquatic Chronic 2	H411	
amines, C12-C14 alkyl					
(branched)***					
REACH Regist. Nr.:					
01-2119493620-38					
O,O,O-triphenyl	209-909-9	597-82-0	Repr. 2	H361	max. 0.9
phosphorothioate			Aquatic Chronic 4	H413	

*: with exposure limit

** Specific concentration limit: Skin Sens. 1B; : $C \ge 46 \%$

*** Specific concentration limit: Skin Sens. 1; : 9.4 % \leq C < 100 %; Eye Dam. 1; : 50 % \leq C < 100 %

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



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 4/(14)

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: Remove contaminated clothing and shoes. Wash skin with large amounts of water, use soap. Discard shoes and other leather articles saturated with the material. 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: Do not induce vomiting. Get prompt 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. May produce an allergic reaction. Prolonged and/or repeated contact may cause dermatitis. If vapours are generated from heating, exposure may cause irritation of mucous membranes and the respiratory tract.
- 4.3 Indication of any immediate medical attention and special treatment need On ingestion.

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 (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 5/(14)

- 5.2 Special hazards arising from the mixture or substance Hazardous combustion products: On burning, carbon dioxide, carbon monoxide, sulphur oxides, aldehydes, alkyl mercaptans, hydrogen sulphide, can be formed. 5.3 Advice for fire-fighters Special protective equipment: According to the existing fire-fighting regulations. Respiratory protection. Further information: In case or fire, keep containers cool with water spray. Do not allow contaminated extinguishing water into waterways, drinking water source, channel reach. 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.
- 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 (see Section 13).
 - 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.



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

Trade name:MOL Hykomol TDL 75W-90 synthetic automotive gear oilVersion: 7Latest revision: 11. 09 2018Date of issue: 10. 10. 2009Page: 6/(14)

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling

 Keep general measures applied for normal operations with chemicals and flammable liquids.
 Keep away from radiant heat and open flame.
 Use in a well-ventilated area. Keep containers closed when not in use.
 Container remains hazardous when empty.
 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 clothing and wash it before reuse.
 Discard shoes and other leather articles saturated with the material.
 When using do not eat, drink or smoke.
 Pumping temperature: ambient
 Handling temperature: max. 70°C
- 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.

SECTION 8 Exposure controls / personal protection

Engineering control measures: Adequate ventilation

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



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 7/(14)

8.2	Exposure controls	
	Personal protection:	
	Respiratory protection:	Breathing apparatus not required in case of adequate ventilation.
		In case of exceeded exposure-limits respiratory protection with
		particle-filter is recommended.
	Hand protection:	Oil resistant gloves (e.g. nitril, PVA) (EN 374, Breakthrough time 480 min).
		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:	Do not wear rings, watches or similar apparel that could entrap
		the material and cause a skin reaction.

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 prope	erties
	Appearance:	
	Physical state:	liquid
	Colour:	brown, clear
	Odour:	characteristic, strong
	Change in physical state:	
	Freezing point:	-57°C
	Pour point (ISO 3016):	not available
	Boiling point:	not available
	Others:	
	Flash point:	180°C
	Ignition point:	not available
	Autoignition temperature:	not available
	Explosive properties:	not explosive
	Oxidizing properties:	not oxidize
	Vapour pressure at 20°C:	negligible
	Density at 15.6°C:	$0.860 - 0.880 \text{ g/cm}^3$
	Solubility in water:	practically insoluble in water
	•	e



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 8/(14)

Solubility in other solvents: 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: gasoline, kerosene, toluene, etc. not available not available inf. 38 000 kJ/kg typ. 104 mm²/s typ. 15.1 mm²/s 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 source, 45°C above the temperature.
10.5	Incompatible materials:	Strong oxidizing agents, carbides, powdered metals (formation of hydrogen gas), strong alkalis.
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 to Acute toxicity:	xicological effects			
	Oral:	LD ₅₀ (rat)	> 10000	mg/kg	(based on components)
	Dermal:	LD ₅₀ (rabbit)	> 2000	mg/kg	(based on components)



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 9/(14)

		ed on components) ed on components)
	Respiratory or skin sensitisation:	not sensitising (based on components), but may produce an allergic reaction.
	Other information, specific effects	:
		a carcinogen need not apply according to 1272/2008/EC, the substance contains less than 3 % DMSO extract as
	Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity:	not known, resp. not mutagen (based on components) not known, resp. not carcinogen (based on components) not known, resp. no reproduction-damaging effect (based on components)
	STOT-single exposure:	not classified
	STOT-repeated exposure: Aspiration hazard:	not classified not classified
SEC	TION 12 Ecological information	l
12.1	Toxicity Aquatic organisms: Soil organisms: Plants:	No data for the product. Fish: no data Invertebrates: 10-100 mg/l
12.2		No data for the product. No data for the product. <i>Components:</i> Reaction products of bis(4- methylpentan-2- yl) dithiophosphoric acid with phosphorous oxide, propylene oxide and amines, C12-C14 alkyl(branched) (EU: 931-384-6) Inherent/sludge: 3.6 %/28 day Sturmtest: 10 %/28 day Sturmtest: 7.4 %/28 day



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 10/(14)

12.3	Bioaccumulative potential	No data available.
12.4	Mobility Mobility in soil Mobility in water:	Absorbs in soil. 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: PCT, PCB and other chlorinated	None.
	hydrocarbons: Environmental effects: Water hazard class (German):	None. Harmful to aquatic life with long lasting effects. WGK 2 (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 02 05* Mineral-based non-chlorinated engine, gear and lubricating oils. Waste Identification Code: 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.

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.



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

Trade name:MOL Hykomol TDL 75W-90 synthetic automotive gear oilVersion: 7Latest revision: 11. 09 2018Date of issue: 10. 10. 2009Page: 11/(14)

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 (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.



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

 Version: 7
 Latest revision: 11. 09 2018
 Date of issue: 10. 10. 2009
 Page: 12/(14)

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 1272/2008/EC (CLP)

Aquatic Chronic 3 H412 calculated method

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

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Flam.Liq. 3	Flammable liquid Category 3
Acute Tox. 4	Acute toxicity Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Skin Sens. 1	Respiratory/skin sensitization Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 2	Reproductive toxicity Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment, Chronic Category 2
Aquatic Chron. 3	Hazardous to the aquatic environment Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment, Chronic Category 4
Legend:	
C	
	ropean Agreement concerning the International Carriage of Dangerous Goods by Inland aterways
	ropean Agreement concerning the International Carriage of Dangerous Goods by Road
	ute Toxicity Estimate
	ocontrentration Factor



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

Version: 7

Latest revision: 11. 09 2018

Date of issue: 10. 10. 2009

Page: 13/(14)

BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labeling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (1272/2008/EC)
CMR	Carcigonic, Mutagenic or toxic to Reproduction
COD	Chamical Oxygen Demand
CSA	
CSR	Chemical Safety Assessment
	Chemical Safety Report Derived Minimal Effect Level
DMEL	
DNEL	Derived No Effect Level
ECHA	European Cheamicals Agency
Ecx	Effective Concentration x%
ErC50	EC50 in terms of reduction of growth rate
Edx	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
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
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts/million
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



according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC MOL-LUB Ltd.

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

Version: 7

Latest revision: 11. 09 2018

Date of issue: 10. 10. 2009

Page: 14/(14)

Revision Ir	ndicators:		
Section	Subject of change	Date	Version
2	Hazards identification	12.11.2010	2
3	Ingredients / Hazardous components		
11	Toxicological information		
15	Regulatory information		
1-16	Regulatory information, other corrections		
3	Composition/information on ingredients	22.06.2012	3
9	Physical and chemical properties		
1-16	Regulatory information, other corrections.		
	Revision modification according to 1272/2008/EC		
3	Composition/information on ingredients	08.10.2012	4
4	First aid measures		
7	Handling and storage		
8	Exposure controls / personal protection		
9	Physical and chemical properties		
10	Stability and reactivity		
11	Toxicological information		
13	Disposal considerations		
16	Other corrections.		
1	Details of the supplier of the safety data sheet,	28.08.2015	5
	Responsible for SDS		
3	Composition/information on ingredients		
9	Physical and chemical properties		
12	Ecological information		
1-16	Other corrections, Revision modification according to 2015/830/EU		
3	Composition/information on ingredients	13.10.2016	6
9	Physical and chemical properties		
1-16	Other corrections, Revision modification		
2, 2.2, 14	Hazards identification. Regulatory information.	11.09.2018	7
3	Composition/information on ingredients		
9	Physical and chemical properties		
11	Toxicological information		
12	Ecological information		
1-16	Other corrections		

