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

Trade name: MOL Hykomol K 80W-140 automotive gear oil

Version: 7 Latest revision: 10. 08. 2018 Date of issue: 20. 06. 2007

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

- 1.1 Product identifier: MOL Hykomol K 85W-140 automotive gear oil
- 1.2 Relevant identified uses of the <u>mixture</u> or substance and uses advised against Relevant identified uses: 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

2.1	Classification of the mixture or sub	ostance	
	Hazard Class and Category:	Hazard staten	nent:
	Skin Sens. 1	H317	May cause an allergic skin reaction.
	Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.



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SA	FETY DA	TA SHEET	M	01
acco	ording to regulation	n (EC) No 1907/2006 (REACH) and	1 1272/2008/EC MOL-	LUB Ltd.
Tra	ade name: M	OL Hykomol K 80W-14	0 automotive gear oil	
Ver	sion: 7 Lat	est revision: 10. 08. 2018	Date of issue: 20. 06. 2007	Page: 2/(14)
2.2	Label elemen	ts		
	Product ident	ification: Trade name: M	OL Hykomol K 80W-140 auto	omotive gear oil
	Hazardous co		-	
	GHS Pictogra		<\vert ≥	
	Signal word:		Warning	
	Hazard staten	nent:	0	
	H317	May cause an all	ergic skin reaction.	
	H411	Toxic to aquatic	life with long lasting effects.	
	Supplemental	hazard information: -		
	•	v statements – General:		
	P101 P102	If medical advice is Keep out of reach of	needed, have product container	or label at hand.
	Precautionary	v statements – Prevention:		
	P273 P280	Avoid release to the Wear protective glov		
		1 0	ves.	
	Precautionary P302 + P352	v statements – Response: IF ON SKIN: Wash	with plenty of water and soap.	
	P333 + P313		ash occurs: Get medical advice/	attention.
	Precautionary	v statements – Storage: -		
	Precautionary	v statements – Disposal:		
	P501	Dispose of contents/	container in accordance with na	ational regulation.
	Tactile warning	es for labelling: ng of danger: Not require ssification: see section 14.	d.	
2.3	Other hazards The product d (EC) 1907/20	oes not contain any PBT or vP	vB substance according to anne	x XIII of regulation

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

Trade name: MOL Hykomol K 80W-140 automotive gear oil

Version: 7 Latest revision: 10. 08. 2018 Date of issue: 20. 06. 2007

SECTION 3 Composition/information on ingredients

- 3.2 Mixtures
 - Chemical description: Mixture of refined mineral base oils containing additives.

Component(s) / Hazardous component(s):

Ŋ	EU	CAS	Hazard classes and	Hazard	Conc.
Name	number	number	cat.	statements	%(m/m)
Distillati (petrolio),	265-157-1	64742-54-7	-	-	max. 40
paraffinici pesanti da			(nota L)		
"hydrotreating" C20- C50*					
REACH Registr. Nr.:					
01-2119484627-25					
Lubricating oils	309-874-0	101316-69-2	-	-	max. 35
(petroleum), C>25*			(note L)		
REACH Registr. Nr.:					
01-2119486948-13					
Long chain alkylamine	273-279-1	68955-53-3	Acute Tox. 4	H302	< 0.3
REACH Registr. Nr.:			Acute Tox. 3	H311	
01-2119456798-18			Skin Corr. 1B	H314	
			Skin Sens. 1A	H317	
			Acute Tox. 2	H330	
			STOT SE 3	H335	
			Aquatic Acute 1	H400 (M=1)	
			Aquatic Chronic 1	H410 (M=1)	
Long chain alkenyl-	204-015-5	112-90-3	Acute Tox. 4	H302	< 0.3
amine			Asp. Tox. 1	H304	
			Skin Corr 1B	H314	
			STOT SE 3	H335	
			STOT RE 2	H373	
			Aquatic Acute 1	H400 (M=10)	
			Aquatic Chronic 1	H410 (M=10)	

*: with exposure limit

The full text of each relevant H- phrase, 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.



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

Trade name: MOL Hykomol K 80W-140 automotive gear oil

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Skin contact: Remove contaminated clothing. 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.

- 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.
- 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 <u>mixture</u> or substance

Hazardous combustion products: On burning, carbon dioxide, carbon monoxide, nitrogen 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.

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Trade name: MOL Hykomol K 80W-140 automotive gear oil

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SECTION 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures 6.1 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. Recover free liquid by 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.
- 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 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 clothing and wash it before reuse. 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) Automotive gear oil.





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

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SEC	TION 8 Exposure controls	/ personal protection	
	Engineering control measure Not required.	s:	
8.1	Control parameters:		
	Mineral oil mist:	excluded (ACGIH).	TEL: 10 mg/m ³ , for oil mist, vapour
	Method of testing, recomm	nended: NIOSH 5026	
8.2	Exposure controls Personal protection:		
	Respiratory protection:		tions not required. In case of exceeded iratory protection with particle-filter is
	Hand protection:	nitrile rubber – minin	EN 374, Breakthrough time 480 min) (e.g. nal thickness 0.33 mm). directions for use and the conditions of observed.
	Eye protection:		ossible, wear safety glasses (EN 166).
	Skin protection:	Protective clothing (o	
	Other special:	No data.	
	Environmental exposure con	trols:	
	Do not discharge into drai	ns/surface waters/grou	ndwater.
SEC	TION 9 Physical and chem	nical properties	
9.1	Information on basic physica Appearance:	l and chemical propert	ies
	Physical state:		liquid
	Colour:		brown, clear
	Odour:		characteristic
	Change in physical state:		
	Pour point (ISO 3016):		typ30°C
	Boiling point (DIN 51356):	not available

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

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- Others: Flash point (COC) (EN ISO 2592): Ignition point (EN ISO 2592): Autoignition temperature: **Explosive properties:** Oxidizing properties: Vapour pressure at 20°C: Density at 15°C (EN ISO 12185): Solubility in water: 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:
- typ. 205°C not available not available not explosive not oxidize negligible 0.880 – 0.900 g/cm³ practically insoluble in water gasoline, kerosene, toluene, etc. not available not available inf. 38 000 kJ/kg typ. 209.9 mm²/s typ. 26.8 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 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.



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MOL SAFETY DATA SHEET **MOL-LUB Ltd.** according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC Trade name: MOL Hykomol K 80W-140 automotive gear oil Version: 7 Latest revision: 10. 08. 2018 Date of issue: 20. 06. 2007 Page: 8/(14) **SECTION 11 Toxicological information** 11.1 Information on toxicological effects Acute toxicity: Oral: LD_{50} (rat) > 2000 (based on components) mg/kg (based on components) Dermal: LD₅₀ (rabbit) > 2000 mg/kg Acute toxicity: irritation Skin: not irritant (based on components) Eye: not irritant (based on components) Respiratory or skin sensitisation: may produce allergic reaction (based on an components) Other information, specific effects: 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 classified STOT-repeated exposure: not classified Aspiration hazard: not classified **SECTION 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. 12.3 Bioaccumulative potential: No data available.

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MOL

MOL-LUB Ltd.

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	Toxic to aquatic life with long lasting 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 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.

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.

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SECTION 14	Transport information

14.1. 14.2.	Road/ Railway UN number: UN proper shipping name:	ADR/RID:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Long chain alkenylamine)
14.3.	Transport hazard class(es):		9
	Hazard class:		M6
	Transport category:		3
14.4.	Packing group:		III
	Label:		9
14.5.	Environmental hazards:		dangerous for the environment
14.6.	Special precautions for user:		00
	Kemler Number:		90 5L
	Limited quantity: Tunnel restriction code:		E
	Tunnel Testriction code.		E
v	Vaterways:		
	Inland waterways/ Sea transport	ADN/IMDG	:
14.1.	• •		3082
14.2.	UN proper shipping name:		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Long chain alkenylamine)
14.3.	Transport hazard class(es):		9
14.4.	Packing group:		III
	Label:		9
14.5.	Environmental hazards:		dangerous for the environment
	Marine pollutant:		yes
14.6.	Special precautions for user:		
	EMS-Number:		F-A, S-F
	in the period		
14.1.	Air transport: ICAO / IATA: UN number:		3082
14.1.	UN proper shipping name:		ENVIRONMENTALLY HAZARDOUS
14.2.	on proper sinpping name.		SUBSTANCE, LIQUID, N.O.S. (contains Long chain alkenylamine)



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accordi	ng to regulation (EC) No 1907/2006 (REACH) a	nd 1272/2008/EC	MOL-I	LUB Ltd.
Trade	e name: MOL Hykomol K 80W-1	140 automotive g	ear oil	
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[
14.3.	Transport hazard class(es):	9		
14.4.	Packing group:	III		
	Label:	9		
14.5.	Environmental hazards:	dangerous f	for the enviro	onment
14.6.	Special precautions for user:	_		

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 1272/2008/EC regulation, Annex XVII. of REACH Relevant Hungarian and EU regulation

MOL-LUB Ltd.

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

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Classification for mixtures and used evaluation method according to regulation 1272/2008/EC (CLP) Skin Sens. 1 H317 calculation method

Aquatic Chronic 2 H411 calculation method

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

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Acute Tox. 4	Acute toxicity Category 4
Asp.Tox.1	Aspiration hazard Category 1
Acute Tox. 3	Acute toxicity Category 3
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1A	Respiratory/skin sensitization Category 1A
Acute Tox. 2	Acute toxicity Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2
Aquatic Acute 1	Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, Chronic Category 1

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 Oxygen Demand
Bw	Body Weight
C&L	Classification and Labeling
CAS	Chemical Abstracts Service



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CLP	Classification, Labelling and Packaging (1272/2008/EC)			
CMR	Carcigonic, Mutagenic or toxic to Reproduction	/			
COD	Chamical Oxygen Demand				
CSA	Chemical Safety Assessment				
CSR	Chemical Safety Report				
DMEL					
DNEL					
ECHA					
Ecx	Effective Concentration x%				
ErC50	EC50 in terms of reduction of growth rate				
Edx	Effective Dose x%				
EC	European Community				
EC nut					
ELINC					
ES	Exposure Scenario				
ESIS	European Chemical Substances Information System				
IARC	International Agency for Research on Cancer				
IATA	International Air Transport Association				
IMDG	IMDG International Maritime Dangerous Goods				
LCx	Lethal Concentration x%				
LDx	Lethal Dose x%) Halálos dózis x%				
LOAEC Lowest Observed Adverse Effect Concentration					
LOAE	L Lowest Observed Adverse Effect Level	Lowest Observed Adverse Effect Level			
LOEC	Lowest Observed Effect Concentration	Lowest Observed Effect Concentration			
LOEL	Lowest Observed Effect Level				
NOEC	No observed effect concentration	No observed effect concentration			
NOEL					
NLP		No-Longer Polymer			
NOAE		No Observed Adverse Effect Level			
OECD		Organisation for Economic Cooperation and Development			
PBT		Persistent Bioaccumulative and Toxic			
PNEC	Predicted No-Effect Concentration	Predicted No-Effect Concentration			
ppm	parts/million				
REAC	•	Registration, Evaluation, Authorisation and Restriction of Chemicals			
RID		Regulations concerning the International carriage of Dangerous Goods by Rail			
SVHC	, U	Substance of Very High Concern			
UVCB	substance of unknown or variable composition, comple materials	substance of unknown or variable composition, complex reaction products or biological materials			
VOC	Volatile organic compounds				
vPvB					
Revision In	dicators:				
Section	Subject of change	Date	Version		
3	Composition/information on ingredients	30.11.2010	2		
1-16	Regulatory information, other corrections.				
1 10	required y information, other confections.				

MOL-LUB Ltd.

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

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Revision Indicators:				
Section	Subject of change	Date	Version	
3	Composition/information on ingredients	27.04.2012	3	
9	Physical and chemical properties			
1-16	Regulatory information, other corrections.			
	Revision modification according to 453/2010/EC			
9	Physical and chemical properties	26.05.2014	4	
1-16	Regulatory information, other corrections			
	Revision modification according to 1272/2008/EC			
3.	Composition/information on ingredients	29.09.2014	5	
16.	Other corrections			
1	Details of the supplier of the safety data sheet,	06.10.2015	6	
	Responsible for SDS			
3	Composition/information on ingredients			
1-16	Other corrections, revision modification according to			
	2015/830 /EU			
1-16	Full revision due to hazards identification	10.08.2018	7	