

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 1/(13)

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

1.1 Product identifier:

MOL Hykomol ZF 80W-90 automotive gear oil

1.2 Relevant identified uses of the mixture 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 substance

Hazard Class and Category: Hazard statement:

Skin Sens. 1

H317

May cause an allergic skin reaction.

Aquatic Chronic 3

H412

Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET



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Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 2/(13)

2.2 Label elements

Product identification: Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Hazardous components: Long chain alkylamine

GHS Pictogram:



Signal word: Warning

Hazard statement:

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Supplemental hazard information: -

Precautionary statements – General:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Precautionary statements – Prevention:

P273 Avoid release to the environment.

P280 Wear protective gloves.

Precautionary statements – Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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.

SAFETY DATA SHEET



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Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 3/(13)

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), C24- C50* REACH Registr.Nr.: 01-2119489969-06	309-877-7	101316-72-7	- (Note L)	-	max. 60
Lubricating oils (petroleum), C>25* REACH Registr.Nr.: 01-2119486948-13	309-874-0	101316-69-2	- (Note L)	-	max. 50
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50* REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	- (Note L)	-	max. 20
Long chain alkylamine REACH Registr. Nr.: 01-2119456798-18	273-279-1	68955-53-3	Acute Tox. 4 Acute Tox. 3 Skin Corr. 1B Skin Sens. 1A Eye Dam. 1 Acute Tox. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1	H302 H311 H314 H317 H318 H330 H335 H400 (M=1) H410 (M=1)	<0.2
Long chain alkenyl-amine	204-015-5	112-90-3	Acute Tox. 4 Asp. Tox. 1 Skin Corr. 1A Eye Dam. 1 STOT SE 3 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H304 H314 H318 H335 H373 H400 (M=10) H410 (M=10)	<0.2

*: with exposure limit

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

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 4/(13)

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. In case of complaints, call medical attention.

Skin contact: Wash skin with large amounts of water, use soap. In case of complaints, get medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. In case of complaints, 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 mixture or substance

Hazardous combustion products:

On burning, carbon monoxide, carbon dioxide, 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.

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 5/(13)

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.

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.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants and flammable materials.
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: no data

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

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 6/(13)

7.3 Specific end use(s)
Automotive gear 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

8.2 Exposure controls
Personal protection:
Respiratory protection: Under normal conditions it is not necessary. In case of exceeded exposure-limits respiratory protection with particle-filter is recommended.
Hand protection: Oil resistant gloves (EN 374, Breakthrough time > 480 min, PK power level: 6; PR flow rate: 0).
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: brown, clear
Odour: characteristic
Change in physical state:
Pour point (ISO 3016): typ. -27°C
Boiling point (DIN 51356): not available

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 7/(13)

Others:

Flash point (COC) (EN ISO 2592):	typ. 205°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):	0.880 -0.900 g/cm ³
Solubility in water:	practically insoluble in water
Solubility in other solvents:	gasoline, kerosene, toluene, etc.
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. 137.6 mm ² /s
Kinematic viscosity at 100°C (EN ISO 3104):	typ. 14.4 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)

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 8/(13)

Acute toxicity: irritation

Skin: not irritant (based on components)

Eye: not irritant (based on components)

Respiratory or skin sensitisation: May cause allergic skin reactions (based on 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 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.

SAFETY DATA SHEET



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Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 9/(13)

Environmental effects: Harmful to aquatic life with long lasting 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.

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.

SECTION 14 Transport information

Land transport:

Road/ Railway

ADR/RID:

Not classified.

- | | | |
|-------|-------------------------------|----------------|
| 14.1. | UN number: | not classified |
| 14.2. | UN proper shipping name: | not classified |
| 14.3. | Transport hazard class(es): | not classified |
| 14.4. | Packing group: | not classified |
| 14.5. | Environmental hazards: | not classified |
| 14.6. | Special precautions for user: | not classified |

SAFETY DATA SHEET



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Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 10/(13)

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.

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)

Skin Sens. 1 H317 calculated

Aquatic Chronic 3 H412 calculated

SAFETY DATA SHEET



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Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 11/(13)

The full text of each relevant H- phrase and Hazard classes and cat. 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.
H318	Causes serious eye damage.
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
Eye Dam. 1	Serious eye damage/eye irritation Category 1
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	Bioconcentration Factor
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	Carcinogenic, Mutagenic or toxic to Reproduction
COD	Chemical Oxygen Demand

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 12/(13)

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%
ErC50	EC50 in terms of reduction of growth rate
Ed _x	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
LC _x	Lethal Concentration x%
LD _x	Lethal Dose x%) Halálos dózis 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

Revision Indicators:

Section	Subject of change	Date	Version
2.	Hazards identification	26.03.2008	2
3.	Composition / information on ingredients		
11.	Toxicological information		
15.	Regulatory information		
16.	Other information		
	Other corrections		

SAFETY DATA SHEET



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

Trade name: **MOL Hykomol ZF 80W-90 automotive gear oil**

Version: 6 Latest revision: 07. 08. 2018 Date of issue: 20. 06. 2007 Page: 13/(13)

Revision Indicators:

Section	Subject of change	Date	Version
3 9 1-16	Composition/information on ingredients Physical and chemical properties Revision modification according to 453/2010/EC and 1272/2008/EC	27.06.2013	3
3. 1-16.	Composition/information on ingredients Regulatory references, other corrections	29.09.2014	4
1 3 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Composition/information on ingredients Other corrections, revision modification according to 2015/830 /EU	06.10.2015	5
2 3 11 12 1-16	Hazards identification Composition/information on ingredients Toxicological information Ecological information Other corrections	07.08.2018	6