

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

MOL-LUB Ltd.

Trade name: MOL MK 9 15W-40 multigrade diesel motor oil

Version: 1 Latest revision: Date of issue: 17. 07. 2019 Page: 1/(14)

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

1.1 Product identifier:

MOL MK 9 15W-40 multigrade diesel motor oil

1.2 Relevant identified uses of the mixture or substance and uses advised against

Relevant identified uses: multigrade diesel motor 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 (on workdays: 07-15²⁰ h (CET)): +36 34 526 210

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 <u>mixture</u> or substance

Hazard Class and Category: Hazard statement:

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting

effects.



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2.2 Label elements

Product identification: Trade name: MOL MK 9 15W-40 multigrade diesel motor oil

Hazardous components: -

GHS Pictogram: Not required. Signal word: Not required.

Hazard statement:

H412 Harmful to aquatic life with long lasting effects.

Supplemental hazard information:

EUH208 Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs.,

calcium salts. May produce an allergic reaction.

Precautionary statements - General: -

Precautionary statements – Prevention:

P273 Avoid 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.



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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	CAS	Hazard classes and	Hazard	Conc.
Iname	number	number	cat.	statements	% (m/m)
Lubricating oils (petroleum), C24-C50* REACH Registr. Nr.: 01-2119489969-06	309-877-7	101316-72-7	(Note L)	-	max. 90
Lubricating oils (petroleum), C18-40* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	(Note L)	-	max. 70
Distillates (petroleum), dewaxed light paraffinic, hydrotreated REACH Registr.Nr.: 01-2119488517-24	295-301-9	91995-40-3	Asp. Tox. 1 (Note L)	H304	max. 15
Phosphorodithioic acid, mixed O,O-bis(1,3- dimethylbutylandiso-Pr) esters, zinc salts** REACH Registr. Nr.: 01-2119493626-26	283-392-8	84605-29-8	Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 2	H315 H318 H411	max. 1.1
Benzenes ulfonic acid, mono-C16-24-alkyl derivs., calciums alts REACH Registr. Nr.: 01-2119492616-28	274-263-7	70024-69-0	Skin Sens.1B	Н317	max. 0.6
O,O,O-triphenyl phosphorothioate REACH Registr. Nr.: 01-2119979545-21	209-909-9	597-82-0	Repr. 2	H361fd	max. 0.11
Phenol, dodecyl-, branched REACH Registr.Nr.: 01-2119513207-49	310-154-3	121158-58-5	Skin Corr. 1C Eye Dam. 1 Repr. 1B Aquatic Acute 1 Aquatic Chronic 1	H314 H318 H360F H400 (M=10) H410 (M=10)	max. 0.04

^{*:} with exposure limit

Skin Irrit. 2; : 6.25 % \leq C \leq 100 %; Eye Irrit. 2; : 10 % < C \leq 12.5 %;

Eye Dam. 1; : $12.5 \% < C \le 100 \%$

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

^{**} Specific concentration limit:



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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 a complaint, call medical

attention.

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

soap. In case of a complaint, get medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. In case of a complaint, get

medical attention.

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

Protection of first-aid person: No data available.

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, sulphur oxides, phosphor oxides, various hydrocarbons and soot can be formed.



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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.

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: not known



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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)

Multigrade diesel motor 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 not required. In case of exceeded

exposure-limits respiratory protection with particle-filter is

recommended.

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: 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



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Change in physical state:

Pour point (ISO 3016): typ. -33°C Boiling point (DIN 51356): not available

Others:

Flash point (COC) (EN ISO 2592): typ. 230°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): $0.870 - 0.890 \text{ g/cm}^3$

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. 107.5 mm²/s
typ. 14.6 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 No dangerous decomposition products are formed under normal

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



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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)

Component:

Lubricating oils (petroleum), C18-40

 $\begin{array}{lll} \text{Oral:} & LD_{50} \ (\text{rat}) & > 5000 \ \text{mg/kg} \\ \text{Dermal:} & LD_{50} \ (\text{rabbit}) & > 2000 \ \text{mg/kg} \\ \text{Inhalation:} & LC_{50} \ (\text{rat}) & > 5.53 \ \text{mg/L} \end{array}$

Lubricating oils (petroleum), C24-C50

 $\begin{array}{lll} \text{Oral:} & LD_{50} \ (\text{rat}) & > 5000 \ \text{mg/kg} \\ \text{Dermal:} & LD_{50} \ (\text{rabbit}) & > 2000 \ \text{mg/kg} \\ \text{Inhalation:} & LC_{50} \ (\text{rat}) & > 5.53 \ \text{mg/L} \end{array}$

Distillates (petroleum), dewaxed light paraffinic, hydrotreated Oral: LD_{50} (rat) > 5000 mg/kg

Dermal: LD_{50} (rabbit) > 2000 mg/kg

Inhalation: LC_{50} (rat) > 5000 mg/m³ (dust, fog)

Acute toxicity: irritation

Skin: not irritant (based on components)
Eye: not irritant (based on components)

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

produce an allergic reaction

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



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SEC	TION 12 Ecological information						
12.1	Toxicity No data available for the product.						
	Component:	_ , _ , _ , _ , _ , _ , _ , _ , _ , _ ,	F				
	Lubricating oils (petroleum), C18-	C40					
	Fish:	LC_{50}	> 100 mg/L				
	Daphnia:	EC_{50}	_				
	Other aquatic organisms:	EC_{50}	> 100 mg/L				
	Other living beings:	TLM	>1 mg/L				
	Lubricating oils (petroleum), C24-C50						
	Fish:	LC_{50}	> 100 mg/L				
	Daphnia:	EC_{50}	> 100 mg/L				
	Other aquatic organisms:	EC_{50}	> 100 mg/L				
	Other living beings:	TLM	>1 mg/L				
	Distillates (petroleum), dewaxed li	ght paraffinic, l	hydrotreated				
	Fish:	LC_{50}	> 100 mg/L				
	Daphnia:	EC_{50}	> 100 mg/L				
	Other aquatic organisms:	EC_{50}	> 100 mg/L				
	Other living beings:	TLM	>1 mg/L				
	Phosphorodithioic acid, mixed O, O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts						
	Fish (Oncorhynchus mykiss):	LC_{50}	4.5 mg/L	96 h			
	Fish (Mutton-headed carp):	LC_{50}	46 mg/L	96 h			
	Fish (Oncorhynchus mykiss):	NOEC	1.8 mg/L	96 h			
	Daphnia:	EC_{50}	23 mg/L	48 h			
	Daphnia:	EC_{50}	>0.8 mg/L	21 days			
	Daphnia:	NOEC	10 mg/L	48 h			
	Daphnia:	NOEC		21 days			
	Green Algae:	EC_{50}	21 mg/L	72 h			
	Green Algae:	NOEC	10 mg/L	72 h			
	Phenol, dodecyl-, branched						
	Fish (Fat-headed carp):	LC_{50}	40 mg/L	96 h			
	Daphnia:	EC_{50}	0.037 mg/L	48 h			
	Shrimp (Mysidopsis Bahia):	EC_{50}	>0.58 mg/L	96 h			
	Daphnia:	EC_{50}	0.0079 mg/L	21 days			
	Daphnia:	NOEC	0.0037 mg/L	21 days			
	Algae:	EC_{50}	0.36 mg/L	72 h			
	Microorganisms (Activated sludge		>1000 mg/L	0.1 day			
1							

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12.2 Persistence and degradability

Biodegradability: Hydrocarbons are inherently degradable.

Phosphorodithioic acid, mixed O, O-bis(1,3-dimethylbutyl and iso-

Pr)esters, zinc salts 1.5% (28 days, OECD TG 301B) Phenol, dodecyl-, branched 25 % (28 days, OECD TG 301 B)

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.

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

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.



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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.

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.

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.



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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 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

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

H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H360F May damage fertility.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn

child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

Asp. Tox. 1 Aspiration hazard Category 1

Skin Corr. 1C Skin corrosion/irritation Category 1C Skin Irrit. 2 Skin corrosion/irritation Category 2

Skin Sens 1B Respiratory/skin sensitization Category 1B
Eye Dam. 1 Serious eye damage/eye irritation Category 1

Repr. 1B Reproductive toxicity Category 1B Repr. 2 Reproductive toxicity Category 2

Aquatic Acute 1 Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, Chronic Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, Chronic Category 2



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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 Labelling CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (1272/2008/EC)
CMR Carcinogenic, Mutagenic or toxic to Reproduction

COD Chemical Oxygen Demand
CSA Chemical Safety Assessment
CSR Chemical Safety Report
DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
ECHA European Chemicals 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



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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	Section Subject of change		Version