

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

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

Version: 9 Latest revision: 06. 01. 2023 Date of issue: 20. 06. 2007 Page: 1/(14)

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

1.1 Product identifier: MOL Dynamic MK 9 15W-40 multigrade diesel engine oil

- 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: multigrade diesel engine 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 Kft. Tel: +36 80 201 296 E-mail: EBKHelpdesk@MOL.hu

1.4 Emergency telephone number Emergency telephone (on workdays: 07-15²⁰ h (CET)): +36 34 526 210 Health Toxicological Information Service (ETTSZ 1097 Budapest, Albert Flórián st. 2-6.) Tel.: +36 80 201 199 (0-24 h, free number, can only be called from Hungary).
+36 1 476 6464 (0-24 h, can be called for a normal fee - also from abroad) National Health Toxicological Information Service:

SECTION 2 Hazards identification

2.1	Classification of the substance or	mixture							
	Hazard Class and Category:	Hazard stat	tement:						
	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 Dyr engine oil	namic N	ИК 9	15W-40	multigrade	e diesel
	Hazardous components:	-						
	GHS Pictogram: Signal word:	not required not required						
	Hazard statement: H412	Harmful to a	quatic life w	ith long I	lasting	effects.		
	Supplemental hazard info	rmation:						
	Precautionary statements	– General: -						
	Precautionary statements P273	 Prevention: Avoid release 	e to the envi	ronment.				
	Precautionary statements	– Response: -						
	Precautionary statements – Storage: -							
	Precautionary statements P501	– Disposal: Dispose of co	ontents/conta	ainer in a	lccorda	ance with	national regu	lation.
	Other liabilities for labell Tactile warning of danger Transport classification: s	not requ	iired.					
2.3	Other hazards The product does not con (EC) 1907/2006, at a cond The mixture does not concentration of 0.1% or	centration of 0. contain any s	1% or more.			0	C C	



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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	EC number	CAS number	Hazard classes and cat.	Hazard statements	Conc. %(m/m)
Distillates (petroleum), solvent-dewaxed heavy paraffinic* REACH Registr. Nr.: 01-2119471299-27	265-169-7	64742-65-0	(Note L)	_	max. 92
Distillates (petroleum), solvent-dewaxed light paraffinic REACH Registr. Nr.: 01-2119480132-48	265-159-2	64742-56-9	Asp. Tox. 1 (Note L)	H304	max. 3.0
Phenol, (tetrapropenyl) derivatives REACH Registr. Nr.: no data	616-100-8	74499-35-7	Skin Corr. 1C Eye Dam. 1 Repr. 1B Aquatic Acute 1 Aquatic Chronic 1	H314 H318 H360F H400 (M=10) H410 (M=10)	<0.04

*: with exposure limit

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

The full text of each relevant H- phrase and 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. Remove the affected person to fresh air. In case of complaints, call medical Inhalation: attention.





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Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use soap. In case of complaints, get medical attention.
Skin contact: Remove contaminated clothing. 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.
- 4.3 Indication of any immediate medical attention and special treatment needed Not required.

SECTION 5 Fire-fighting measures

Fire hazards: Combustible.

5.1 Extinguishing media
 Suitable extinguishing media:
 Foam, carbon dioxide, dry chemical powder, water fog (trained personnel only).

Unsuitable extinguishing media: Full water jet.

5.2 Special hazards arising from the substance or mixture Hazardous combustion products: On burning, carbon dioxide, carbon monoxide, 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 firefighting 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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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 removed. 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.
 Wash hands before breaks and at end of work.
 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) Multigrade diesel engine oil.



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SEC	CTION 8 Exposure contro	ls / personal protection	
8.1	Control parameters:		
		(ACGIH).	/m ³ , for oil mist, vapour excluded
8.2	Exposure controls		
	Engineering control measures: Not required.		
	Personal protection: (a) Eye/face protection (b) Skin protection (i) Hand protection (ii) Other (c) Respiratory protection (d) Thermal hazards	Oil resistant gloves (EN 374 PK power level: 6; PR flow r Note: Manufacturer's directi application should be observe Protective clothing (oil resist Under normal conditions i exceeded exposure-limits res filter is recommended. No data.	ons for use and the conditions of ed.
	Environmental exposure contro Do not discharge into drain	ls: ss/surface waters/groundwater.	
SEC	CTION 9 Physical and chem	ical properties	
9.1	Information on basic physical a	nd chemical properties	
	 a) Physical state: b) Colour: c) Odour: d) Melting point/freezing point 	nt (Pour point) (ISO 3016):	liquid brown, clear characteristic typ33°C



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N 51356): nmability: ver and upper explosion limit: h point (COC) (EN ISO 2592): o-ignition temperature: omposition temperature:	not available combustible not explosive typ. 230°C not available not available
ver and upper explosion limit: h point (COC) (EN ISO 2592): o-ignition temperature: omposition temperature:	not explosive typ. 230°C not available
h point (COC) (EN ISO 2592): o-ignition temperature: omposition temperature:	typ. 230°C not available
o-ignition temperature: omposition temperature:	not available
omposition temperature:	
	not available
	not applicable
ematic viscosity (EN ISO 3104)	
at 40°C:	typ. 107.5 mm ² /s
at 100°C	typ. 14.9 mm ² /s
ıbility	
Solubility in water:	practically insoluble in water
Solubility in other solvents:	gasoline, kerosene, toluene, etc.
ition coefficient n-octanol/water (log value):	not available
our pressure at 20°C:	negligible
sity and/or relative density at 15°C (DIN EN ISO	
85):	$0.870 - 0.890 \text{ g/cm}^3$
ative vapour density:	not available
icle characteristics:	not available
formation	
dizing properties:	not oxidize
ting value:	inf. 38 000 kJ/kg
fc di	ormation izing properties:

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.

11.2

concentration of 0.1% or more.



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SECTION 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity: Based on available data, the classification criteria are not met

Oral:	LD ₅₀	(rat)	> 2000	mg/kg	(based on components)
Dermal:	LD_{50}	(rabbit)	> 2000	mg/kg	(based on components)
Components:					
Distillates (petroleum), s		•			
Oral:	LD_{50}	(rat)	> 5000	mg/kg	(literature data)
Dermal:	LD_{50}	(rabbit)	> 2000	mg/kg	(literature data)
Inhalation:	LC ₅₀ ((rat)	> 5.53	mg/L/4 h	(literature data)
Lubricating oils (petrole	um), C18	-40 solvent-d	lewaxed h	ydrocracked	distillate-based
Oral:	LD ₅₀			mg/kg	(literature data)
Dermal:		(rabbit)		mg/kg	(literature data)
Inhalation:		(rat)		mg/L/4 h	(literature data)
Phenol, (tetrapropenyl) a	lerivative	es (CAS: 7449	99-35-7)		
Oral:	LD ₅₀		,	mg/kg	(OECD 401)
Dermal:		(rabbit)		mg/kg	(OECD 402)
		D 1			
Skin corrosion/irritation:				,	ification criteria are not met.
Serious eye damage/irrita					ification criteria are not met.
Respiratory or skin sensi	tisation:				ification criteria are not met.
Germ cell mutagenicity:					ification criteria are not met.
Carcinogenicity:		Based on av	vailable d	ata, the classi	ification criteria are not met.
Reproductive toxicity:		Based on av	vailable da	ata, the classi	ification criteria are not met.
STOT-single exposure:		Based on av	vailable da	ata, the classi	ification criteria are not met.
STOT-repeated exposure	:	Based on av	vailable da	ata, the classi	ification criteria are not met.
Aspiration hazard:		Based on av	vailable d	ata, the classi	ification criteria are not met.
Information on other haz	ards				
The mixture does not	contain	any substan	ce with	endocrine d	isrupting properties, at a



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SECTION 12 Ecol	ogical information
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12.1 Toxicity Harmful to aquatic life with long lasting effects. Components: Distillates (petroleum), solvent- dewaxed heavy paraffinic (CAS: 64742-65-0) Fishes: LC_{50} > 100 mg/L(literature data) Daphnia: EC_{50} > 100 mg/L(literature data) Other aquatic organisms: > 100 mg/L EC_{50} (literature data) Algae: ErC_{50} > 100 mg/L(literature data) Other living beings: (literature data) TLM > 1 mg/L*Distillates (petroleum), solvent-dewaxed light paraffinic (CAS: 64742-56-9)* Fish: LC_{50} >100 mg/L Other aquatic organisms: EC_{50} > 100 mg/LAlgae: > 100 mg/L ErC_{50} Crustacea: NOEC > 1 mg/LPhenol, (tetrapropenyl) derivatives (CAS: 74499-35-7) Fish (Fat-headed carp): LC50 40 mg/L 96 h Daphnia: EC_{50} 0.037 mg/L 48 h Crustacea (Mysidopsis Bahia): > 0.58 mg/L96 h EC_{50} Daphnia: EC_{50} 0.0079 mg/L 21 days Daphnia: NOEC 0.0037 mg/L 21 days Algae: 72 h EC_{50} 0.36 mg/L Microorganisms (activated sludge): EC_{50} > 1000 mg/L0.1 day 12.2 Persistence and degradability **Biodegradability:** Hydrocarbons are inherently degradable. 12.3 Bioaccumulative potential No data available. 12.4 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, at a concentration of 0.1% or more.



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12.6	Endocrine disrupting properties	The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.
12.7	Other adverse effects Heavy metal content: PCT, PCB and other chlorinated	None.
	hydrocarbons:	None.
	Environmental effects:	Spills may form a film on water surfaces causing
	Water hazard class (German):	impaired oxygen transfer. WGK 1 (Classification by AwSV)

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.



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SECTION 14 Transport information

	Land transport:		
	Road/ Railway	ADR/RID:	Not classified.
14.1.	UN number or ID 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 substance or mixture This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2020/878/EU) and to Regulation (EC) 1272/2008. Seveso category: not classified.
- 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.

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC (CLP) Aquatic Chronic 3 H412 calculation method



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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.
H318	Causes serious eye damage.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Asp. Tox. 1	Aspiration hazard Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 1B	Reproductive toxicity Category 1B
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 Labelling
CAS	Chemical Abstracts Service
CLP	Classification and Labelling
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%
Edx	Effective Dose x%
ELINCS	European List of Notified Chemical Substances
ErC50	EC50 in terms of reduction of growth rate;
ES	Exposure Scenario
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods



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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
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
3	Composition / information on ingredients	26. 02. 2008	2
1-16	Revision modification according to REACH		
	(1907/2006/EC)		
1	Product name	08. 02. 2010	3
3	Composition / information on ingredients		
	Other corrections		
3	Composition/information on ingredients	13.05.2011	4
1-16	Revision modification according to 453/2010/EC		
2	Hazards identification	27.05.2013	5
3	Composition/information on ingredients		
9	Physical and chemical properties		
11	Toxicological information		
1-16	Revision modification according to 1272/2008/EC		
1	Details of the supplier of the safety data sheet,	14. 09. 2015	6
	Responsible for SDS		
3	Composition/information on ingredients		
9	Physical and chemical properties		
1-16	Other corrections, revision modification according to		
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4.2 9	Most important symptoms and effects, both acute and		
	delayed Deviced and chemical properties		
9 11.	Physical and chemical properties Toxicological information		
12.	Ecological information		
16	Other corrections		
1-16	Revision modification according to 2020/878/EU	06. 01. 2023	9
	Full revision due to composition change		