



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 1/(13)

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

1.1 Product identifier:

MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil

1.2 Relevant identified uses of the mixture or substance 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 Trade and Service Limited Liability Company

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 Trade and Service Limited Liability Company

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, Nagyváradi 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:

Not classified.



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 2/(13)

2.2 Label elements

Product identification: Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Hazardous component(s): -

GHS Pictogram: not required.

Signal word: not required.

Hazard statement:

not required

Supplemental hazard information:

EUH210 Safety data sheet available on request.

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.



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 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)
Distillates (petroleum), hydrotreated heavy paraffinic, C20-C50*	265-157-1	64742-54-7	- (Note L)	-	max. 80
Distillates (petroleum), hydrotreated heavy paraffinic, C20-C50*	265-157-1	64742-54-7	Asp. Tox. 1 (Note L)	H304	max. 40
Lubricating oils (petroleum), C24- C50* REACH Registr.Nr.: 01-2119489969-06	309-877-7	101316-72-7	- (Note L)	-	max. 10
Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate REACH Registr.Nr.: 01-0000015551-76	406-040-9	125643-61-0	Aquatic Chronic 4	H413	max. 3.0
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) REACH Registr.Nr.: 01-2119543726-33	298-577-9	93819-94-4	Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 2	H315 H318 H411	max. 1.5
Bis(nonylphenyl)amine REACH Registr.Nr.: 01-2119488911-28	253-249-4	36878-20-3	Aquatic Chronic 4	H413	max. 1.5

*: with exposure limit

** Individual concentration limit: Eye Dam. 1; : 12.5% <C ≤ 100%

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

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 Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 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. If rapid recovery does not occur, obtain medical attention.

Skin contact: 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.

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 dioxide, carbon monoxide, sulphur oxide, phosphor oxides, various hydrocarbons and soot can be formed.

SAFETY DATA SHEET



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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 5/(13)

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 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



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 6/(13)

- 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.

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:	yellow, bright, clear
Odour:	characteristic



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4

Latest revision: 16. 04. 2019

Date of issue: 22. 01. 2014

Page: 7/(13)

Change in physical state:

Pour point (ISO 3016):

typ. -36°C

Others:

Flash point (COC) (EN ISO 2592):

typ. 225°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):

0.850 – 0.870 g/cm³

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. 107.7 mm²/s

Kinematic viscosity at 100°C (EN ISO 3104):

typ. 15.5 mm²/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: LD₅₀ (rat) > 2000 mg/kg (based on components)

Dermal: LD₅₀ (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 Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 8/(13)

Components:

Distillates (petroleum), hydrotreated heavy paraffinic, C20-C50:

Oral: LD₅₀ (rat) > 5000 mg/kg

Dermal: LD₅₀ (rabbit) > 2000 mg/kg

Inhalation: LC₅₀ (rat) > 5.0 mg/L

Lubricatingoils (petroleum), C24-C50:

Oral: LD₅₀ (rat) > 5000 mg/kg

Dermal: LD₅₀ (rabbit) > 2000 mg/kg

Inhalation: LC₅₀ (rat) > 5.53 mg/L

Zinc bis[O-(6- methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):

Oral: LD₅₀ (rat) 2600 mg/kg

Dermal: LD₅₀ (rabbit) >3160 mg/kg OECD 402

Inhalation: LC₅₀ (rat) > 2.0 mg/L (1 h) OECD 403

Acute toxicity: irritation

Skin: not irritant (based on components)

Eye: not irritant (based on components)

Respiratory or skin sensitisation: not sensitising (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

No data for the product.



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 9/(13)

Components:

Distillates (petroleum), hydrotreated heavy paraffinic, C20-C50:

Fish:	>1000 mg/L	96 h (OECD 203)
Daphnia:	>100 mg/L	48 h (OECD 202)
Alga:	>100 mg/L	72 h (OECD 201)

Lubricatingoils (petroleum), C24-C50:

Fish:	LC ₅₀	> 100 mg/L
Daphnia:	EC ₅₀	> 100 mg/L
Other aquatic organisms:	EC ₅₀	> 100 mg/L
Other aquatic living beings:	TLM	>1 mg/L

Zinc bis[O-(6- methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):

Fish (Oncorhynchus mykiss):	LC ₅₀	4.5 mg/L	96 h (OECD 203)
Daphnia (Daphnia magna):	EL ₅₀	5.4 mg/L	48 h (OECD 202)
Alga (Selenastrum capricornutum):	EbC ₅₀	2.1 mg/L	96 h (OECD 201)

12.2 Persistence and degradability

Biodegradability: Hydrocarbons are inherently degradable.
1.5% (10.0 mg/l; 28 day; OECD 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: Spills may form a film on water surfaces causing impaired oxygen transfer.
Water hazard class (German): WGK 1 (Classification by VwVwS)



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 10/(13)

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.

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.



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 11/(13)

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 1272/2008/EC (CLP)

Not classified.

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.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 12/(13)

Asp. Tox. 1	Aspiration hazard Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment, Chronic Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment, Chronic Category 4

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
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
Ex	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
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



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Global Diesel 10W-40 multigrade diesel engine oil**

Version: 4 Latest revision: 16. 04. 2019 Date of issue: 22. 01. 2014 Page: 13/(13)

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
1 3 12 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Composition/information on ingredients Ecological information Other corrections, revision modification according to 1272/2008/EC and 2015/830 /EU	02.09.2015	2
2 3 9 11 1-16	Hazards identification Composition/information on ingredients Physical and chemical properties Toxicological information Other corrections	15.02.2018	3
2 3 9 11 12 1-16	Hazards identification Composition/information on ingredients Physical and chemical properties Toxicological information Ecological information Other information	16.04.2019	4