

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

Trade name: MOL Dynamic Gold DX 0W-20 synthetic engine oil

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

1.1 Product identifier:

## MOL Dynamic Gold DX 0W-20 synthetic engine oil

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: synthetic engine oil. For residential and professional use.

Uses advised against: application other than the above.

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: 07-15<sup>20</sup> h (CET)): +36 34 526 210

Health Toxicological Information Service (ETTSZ 1097 Budapest, Albert Flórián út 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 statement:

Not classified.



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#### 2.2 Label elements

Product identification: Trade name: MOL Dynamic Gold DX 0W-20 synthetic engine oil

Hazardous components: -

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, at a concentration of 0.1% or more.

The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.



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# **SECTION 3** Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixture of refined mineral base oils and hydrotreated neutral oil

containing additives.

Component(s) / Hazardous component(s):

Name	EC	CAS	Hazard classes and	Hazard	Conc.
	number	number	cat.	statements	%(m/m)
Distillates (petroleum), hydrotreated heavy paraffinic REACH Registr. Nr.:	265-157-1	64742-54-7	Asp. Tox. 1 (Note L)	H304	max. 85
01-2119484627-25  1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated REACH Registr. Nr.: no data	614-695-9	68649-12-7	Asp. Tox. 1 (Note L)	H304	max. 14
Distillates (petroleum), hydrotreated heavy paraffinic* REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	(Note L)	-	max. 12.0
1-Decene, homopolymer, hydrogenated REACH Registr. Nr.: 01-2119486452-34	500-183-1	68037-01-4	Asp. Tox. 1 (Note L)	H304	max. 3.0
Bis(nonylphenyl)amine REACH Registr. Nr.: 01-2119488911-28	253-249-4	36878-20-3	Aquatic Chronic 4	H413	max. 1.1
Zinc dialkyl dithiophosphate** REACH Registr. Nr.: 01-2119953275-34	218-679-9	2215-35-2	Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 2	H315 H318 H411	max. 1.1

<sup>\*:</sup> with exposure limit

Skin Irrit. 2, H315: C ≥ 15%; Eye Dam. 1, H318: C≥ 20%; Eye Irrit. 2, H319: 15% ≤ C < 20%

<sup>\*\*</sup>Specific concentration limit:



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#### 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.

Inhalation: Remove the affected person to fresh air. If rapid recovery does not occur, obtain

medical attention.

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.

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).



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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, sulphur 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 firefighting 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 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.

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### **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.

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)

Synthetic engine oil.

## **SECTION 8** Exposure controls / personal protection

8.1 Control parameters:

Mineral oil mist: TWA: 5 mg/m<sup>3</sup>; STEL: 10 mg/m<sup>3</sup>, for oil mist, vapour excluded

(ACGIH).

Method of testing, recommended: NIOSH 5026

8.2 Exposure controls

Engineering control measures:

Not required.

Personal protection:

(a) Eye/face protection Where splashing is possible, wear safety glasses (EN 166).

(b) Skin protection

(i) 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.

(ii) Other Protective clothing (oil resistant).



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(c) Respiratory protection Under normal conditions not required. In case of exceeded

exposure-limits respiratory protection with particle-filter is

recommended.

(d) Thermal hazards 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

a) Physical state:
b) Colour:
c) Odour:
d) Display the control of the contr

d) Melting point/freezing point (Pour point) (ISO 3016): typ. -42°C

e) Boiling point or initial boiling point and boiling range (DIN 51356):

(DIN 51356): not available f) Flammability: combustible g) Lower and upper explosion limit: not explosive

h) Flash point (COC) (EN ISO 2592): typ. 200°C
i) Auto-ignition temperature: not available

j) Decomposition temperature: not available

k) pH: not applicable
l) Kinematic viscosity (EN ISO 3104)

at 40°C: typ. 43.0 mm<sup>2</sup>/s

at 100°C typ.  $8.5 \text{ mm}^2/\text{s}$ 

m) Solubility

Solubility in water: practically insoluble in water Solubility in other solvents: gasoline, kerosene, toluene, etc.

n) Partition coefficient n-octanol/water (log value): not available o) Vapour pressure at 20°C: negligible

p) Density and/or relative density at 15°C (DIN EN ISO

12185):  $0.840 - 0.860 \text{ g/cm}^3$ 

q) Relative vapour density: not available r) Particle characteristics: not available

9.2 Other information

Oxidizing properties: not oxidize

Heating value: inf. 38 000 kJ/kg



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### **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 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), hydrotreated heavy paraffinic (CAS: 64742-54-7)

1-Decene Homopolymer Hydrogenated (CAS: 68037-01-4)

 $\begin{array}{lll} \text{Oral:} & \text{LD}_{50} \ (\text{rat}) & > 5000 \ \text{mg/kg} \\ \text{Dermal:} & \text{LD}_{50} \ (\text{rabbit}) & > 2000 \ \text{mg/kg} \end{array}$ 

Inhalation:  $LC_{50}$  (rat) > 5.2 mg/L (dust, fog)

Zinc dialkyl dithiophosphate (CAS: 2215-35-2)

Skin corrosion/irritation:

Serious eye damage/irritation:

Respiratory or skin sensitisation:

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

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Reproductive toxicity:

STOT-single exposure:

STOT-repeated exposure:

Aspiration hazard:

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.

## **SECTION 12** Ecological information

12.1 Toxicity Based on available data, the classification criteria are not met.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic (CAS: 64742-54-7)

 $\begin{array}{lll} Fish: & LL_{50} & > 100 \ mg/L \\ Invertebrates: & EL_{50} & > 10000 \ mg/L \\ Algae: & NOEL & > 100 \ mg/L \end{array}$ 

1-Decene Homopolymer Hydrogenated (CAS: 68037-01-4)

Fish (Pimephales promelas):  $LC_{50} > 750 \text{ mg/L}$  96 h

Daphnia (Daphnia magna):  $EL_{50} > 1000 \text{ mg/L}$  48 h (OECD 202)

Algae (Selenastrum capricornutum): EC<sub>50</sub> > 1000 mg/L 96 h

*Zinc dialkyl dithiophosphate (CAS: 2215-35-2)* 

Fishes (Oncorhynchus mykiss): 4,5 mg/L96 h LL50 Daphnia (Daphnia magna):  $EL_{50}$ 23 mg/L48 h Algae (Desmodesmus subspicatus):  $EL_{50}$ 24 mg/L72 h Microorganism: > 10000 mg/L $EL_{50}$ 3 h Algae (Desmodesmus subspicatus): NOEL 10 mg/L72 h Daphnia (Daphnia magna): 0.4 mg/L**NOEL** 

12.2 Persistence and degradability

Biodegradability: No data for the product.

Distillates (petroleum), hydrotreated 30% (28 day, OECD 301F), not easily but inherently

heavy paraffinic (CAS: 64742-54-7) degradable.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil:

Mobility in water:

Absorbs in soil.

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: None.

PCT, PCB and other chlorinated

hydrocarbons: None.

Environmental effects: Large spills may be hazardous to the environment.

Spills may form a film on water surfaces causing

impaired oxygen transfer.

Water hazard class (German): 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.

Waste Identification Code: 13 02 06\* Synthetic 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

Land transport:

Road/Railway ADR/RID: Not classified.

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):
14.4. Packing group:
Not classified.
Not classified.

Not classified.
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.



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Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 (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.

H411 Toxic to aquatic life with long lasting effects.

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

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

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%

ErC50 EC50 in terms of reduction of growth rate

Edx Effective Dose x%
EC European Community
EC number European Community

EC number European Community number
ELINCS European List of Notified Chemical Substances



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ES Exposure Scenario

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

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
1-16	Revision modification according to 2020/878/EU	19. 12. 2022	2
	Full revision due to composition change		
3	Composition/information on ingredients	14. 02. 2023	3
9	Physical and chemical properties		
11	Toxicological information		
12	Ecological information		