



Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 1/(12)

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

1.1 Product identifier:

MOL Dynamic Gold NG 0W-16 synthetic motor oil

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

Relevant identified uses: synthetic 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.

Phone: +36 80 201 296

e-mail: EBKHelpdesk@MOL.hu

1.4 Emergency telephone number

Emergency telephone (07-15²⁰ h): +36 34 526 210 (CET) on workdays

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 statement:

Not classified.



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 2/(12)

2.2 Label elements

Product identification: Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor 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.



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 3/(12)

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 number	CAS number	Hazard classes and cat.	Hazard statements	Conc. %(m/m)
Distillates (petroleum), hydrotreated heavy paraffinic REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	Asp. Tox. 1 (Note L)	H304	max. 80
Dec-1-ene, homopolymer, hydrogenated REACH Registr. Nr.: 01-2119486452-34	500-183-1	68037-01-4	-	-	max. 10
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
Long-chain olefin sulphides REACH Registr. Nr.: 18-2120787773-37	-	-	Aquatic Chronic 4	H413	max. 1.1

^{*:} with exposure limit

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.

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: Wash skin with large amounts of water, use soap. In case of persistent irritation,

get medical attention.

^{**}Specific Concentration limits: Eye Dam. 1; : $10 \% < C \le 100 \%$





Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 4/(12)

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.

Unsuitable extinguishing media:

Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

On burning, carbon dioxide, carbon monoxide, sulphur oxide, 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 fire-fighting water separately. It must not enter the sewage system.

Contaminated extinguishing water must be disposed of in accordance with official regulations.



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 5/(12)

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. Contain spilled liquid with

sand, earth or other suitable absorbents. Recover free liquid by pumping.

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

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 motor oil.





Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 6/(12)

SECTION 8 Exposure controls / personal protection

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

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) (e.g.

nitrile rubber – minimal thickness 0.33 mm).

Note: Manufacturer's directions for use and the conditions of

application should be observed.

(ii) Other Protective clothing (oil resistant).

(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: liquid

b) Colour: brown, clearc) Odour: characteristic

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

e) Boiling point or initial boiling point and boiling range: not available

f) Flammability: combustible

g) Lower and upper explosion limit: not available



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 7/(12)

h) Flash point (COC) (EN ISO 2592): typ. 210°C
i) Auto-ignition temperature: not available
j) Decomposition temperature: not available
k) pH: not applicable

1) Kinematic viscosity (EN ISO 3104):

at 40°C: typ. 40.5 mm²/s at 100°C: typ. 7.7 mm²/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 Vapour pressure at 20°C: negligible

p) Density and/or relative density at 15°C (EN ISO 12185): 0.840 – 0.860 g/cm³

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

9.2 Other information

Heating value: inf. 38 000 kJ/kg

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)



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 8/(12)

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

Oral: LD_{50} (rat) > 2000 mg/kg OECD 401 Dermal: LD_{50} (rabbit) > 2000 mg/kg OECD 402 Inhalation: LC_{50} (rat) > 5000 mg/m³ OECD 403

Dec-1-ene, homopolymer, hydrogenated (CAS: 68037-01-4)

Oral: LD_{50} (rat) > 5000 mg/kg Dermal: LD_{50} (rabbit) > 2000 mg/kg

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

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

 Oral:
 LD_{50} (rat)
 2000-5000 mg/kg
 OECD 401

 Dermal:
 LD_{50} (rabbit)
 > 3160 mg/kg
 OECD 402

 Inhalation:
 LC_{50} (rat)
 > 2 mg/m³
 OECD 403

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Serious eye damage/irritation: Respiratory or skin sensitisation: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met. STOT-single exposure: Based on available data, the classification criteria are not met. STOT-repeated exposure: Based on available data, the classification criteria are not met. Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

No data.

SECTION 12 Ecological information

12.1 Toxicity No data for the product.

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

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

Dec-1-ene, homopolymer, hydrogenated (CAS: 68037-01-4)

Fish (Pimephales promelas): LC₅₀ >750 mg/L 96 h

Daphnia (Daphnia magna): EL₅₀ >1000 mg/L 48 h (OECD 202)

Algae: EC_{50} >1000 mg/L 96 h



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 9/(12)

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

Fishes (Oncorhynchus mykiss): LL_{50} 4,5 mg/L96 h Daphnia (Daphnia magna): EL_{50} 23 mg/L 48 h Daphnia: NOEL 0.4 mg/L21 days Algae (Desmodesmus subspicatus): EL_{50} 24 mg/L 72 h Algae (Desmodesmus subspicatus): **NOEL** 10 mg/L 72 h

12.2 Persistence and degradability

Biodegradability: Hydrocarbons are inherently degradable.

Zinc dialkyl dithiophosphate 1.5 % (28 days, OECD TG 301 B)

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.

12.6 Endocrine disrupting properties No data.

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.



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

Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 10/(12)

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.

Recommended waste treatment method: incineration

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 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





Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 11/(12)

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)

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.

H413 May cause long lasting harmful effects to aquatic life.

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 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





Trade name: MOL Dynamic Gold NG 0W-16 synthetic motor oil

Version: 1 Latest revision: - Date of issue: 21. 06. 2021 Page: 12/(12)

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% European Community

EC number European Community number

ELINCS European List of Notified Chemical Substances

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