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

1.1 Product identifier:
MOL GMO MA 40 gas engine oil

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: gas engine oil for industrial 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 (07-15^{20} 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.	-

2.2 Label elements

Product identification: Trade name: **MOL GMO MA 40 gas engine oil**

Hazardous components: -

GHS Pictogram: not required
Signal word: not required

Hazard statement:
not required

Supplemental hazard information:
EUH208 Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.
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.

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. 90
Residual oils (petroleum), solvent-dewaxed* REACH Registr. Nr.: 01-2119480472-38	265-166-0	64742-62-7	- (Note L)		max. 30
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. 1.1
C14-16-18 Alkyl phenol** REACH Registr. Nr.: 01-2119498288-19	931-468-2	-	Skin Sens. 1B STOT RE 2	H317 H373	<1.1

*: with exposure limit

**According to the manufacturer's declaration, the product is not a sensitiser

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. D**o 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.
May produce an allergic reaction.

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:
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 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.

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)
Gas engine oil.

SECTION 8 Exposure controls / personal protection

8.1 Control parameters:

Mineral oil mist: TWA: **5 mg/m^3**; STEL: 10 mg/m^3, 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).
(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, clear
c)	Odour:	characteristic
d)	Melting point/freezing point (Pour point) (ISO 3016):	typ. -18°C
e)	Boiling point or initial boiling point and boiling range:	not available

f)	Flammability:	combustible
g)	Lower and upper explosion limit:	not available
h)	Flash point (COC) (EN ISO 2592):	typ. 258°C
i)	Auto-ignition temperature:	not available
j)	Decomposition temperature:	not available
k)	pH:	not applicable
l)	Kinematic viscosity at (DIN EN ISO 3104):	
	40°C:	typ. 145.8 mm^2/s
	100°C	typ. 14.7 mm^2/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):	0.875 – 0.895 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

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), solvent-dewaxed heavy paraffinic (CAS: 64742-65-0)

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 (4h)	(Literature data)

Residual oils (petroleum), solvent-dewaxed CAS: 64742-62-7)

Oral:	LD_{50} (rat)	> 5000	mg/kg	OECD 401
Dermal:	LD_{50} (rabbit)	> 5000	mg/kg	OECD 402
Inhalation:	LC_{50} (rat)	> 5.53	mg/L (4h)	OECD 403

Distillates (petroleum), solvent-dewaxed light paraffinic (CAS: 64742-56-9)

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 (4h)	(Literature data)

Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
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.

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:	EC_{50}	> 100	mg/L	(literature data)
Algae:	ErC_{50}	> 100	mg/L	(literature data)
Other living beings:	TLM	> 1	mg/L	(literature data)

Residual oils (petroleum), solvent-dewaxed CAS: 64742-62-7)

Fishes:	LC_{50}	> 100	mg/L	(literature data)
Other aquatic organisms:	EC_{50}	> 100	mg/L	(literature data)
Algae:	ErC_{50}	> 100	mg/L	(literature data)
Other living beings:	TLM	> 1	mg/L	(literature data)

Distillates (petroleum), solvent-dewaxed light paraffinic (CAS: 64742-56-9)

Fish:	LC_{50}	> 100	mg/L
Other aquatic organisms:	EC_{50}	> 100	mg/L
Algae:	ErC_{50}	> 100	mg/L
Crustacea:	NOEC	> 1	mg/L

12.2 Persistence and degradability — No data available.
Biodegradability: No data available.

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.

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 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 (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.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1	Aspiration hazard Category 1
Skin Sens. 1B	Respiratory/skin sensitization Category 1B
STOT RE 2	Specific target organ toxicity – repeated exposure 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 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
3 9 1-16	Composition/information on ingredients Physical and chemical properties Revision modification according to 453/2010/EC and 1272/2008/EC	27. 05. 2013	2
1 3 9 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Composition/information on ingredients Physical and chemical properties Other corrections, revision modification according to 2015/830 /EU	01. 10. 2015	3
3 4.2 8 9	Composition/information on ingredients Most important symptoms and effects, both acute and delayed Exposure controls / personal protection Physical and chemical properties	12. 12. 2018	4
1-16	Full revision due to composition change Revision modification according to 2020/878/EU	16. 08. 2021	5