



SAFETY DATA SHEET

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

MOL-LUB Ltd.

Trade name: **MOL Dynamic Transit 10W-40 universal engine oil**

Version: 12 Latest revision: 11. 05. 2020 Date of issue: 20. 06. 2007 Page: 1/(15)

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

1.1 Product identifier:

MOL Dynamic Transit 10W-40 universal engine oil

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

Relevant identified uses: universal 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 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 (on workdays: 07-15²⁰ h (CET)): +36 34 526 210

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:

Eye Irrit. 2

H319

Causes serious eye irritation.

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2.2 Label elements

Product identification: Trade name: **MOL Dynamic Transit 10W-40 universal engine oil**

Hazardous component(s): -

GHS Pictogram:



Signal word: **Warning**

Hazard statement:

H319 Causes serious eye irritation.

Supplemental hazard information:

EUH208 Contains Calcium long chain alkaryl sulfonate (C20-26) and Calcium long chain alkaryl sulfonate. May produce an allergic reaction.

Precautionary statements – Prevention:

P273 Avoid release to the environment.

P280 Wear eye protection.

Precautionary statements – Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

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.



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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	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Lubricating oils (petroleum), C24-C50* REACH Registr. Nr.: 01-2119489969-06	309-877-7	101316-72-7	- (Note L)	-	max. 56
Lubricating oils (petroleum), C18-40* REACH Registr. Nr.: 01-2119486987-11	305-594-8	94733-15-0	- (Note L)	-	max. 56
Distillates (petroleum), hydrotreated heavy paraffinic* REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	- (Note L)	-	max. 30
Distillates (petroleum), dewaxed light paraffinic, hydrotreated REACH Registr. Nr.: 01-2119488517-24	295-301-9	91995-40-3	Asp.Tox.1 (Note L)	H304	max. 10
Mineral oil raffinate*		mixture**	- (Note L)	-	max. 6.0
Polyolefin polyamine succinimide, polyol REACH Registr. Nr.: no data	604-611-9	147880-09-9	Aquatic Chronic 4	H413	max. 4.0
Zinc dialkyl dithiophosphate REACH Registr. Nr.: 01-2119657973-23	272-238-5	68784-31-6	Eye Dam. 1 Aquatic Chronic 2	H318 H411	max. 1.3
Calcium long chain alkaryl sulfonate (C20-26)*** REACH Registr. Nr.: no data	polymer	722503-69-7	Aquatic Chronic 4	H413	max. 1.3
Calcium long chain alkaryl sulfonate (C20-26) REACH Registr. Nr.: no data	polymer	722503-69-7	Skin Sens. 1 Aquatic Chronic 4	H317 H413	max. 1.3

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Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Calcium long chain alkaryl sulfonate REACH Registr. Nr.: no data	polymer	722503-68-6	Skin Sens. 1B Aquatic Chronic 4	H317 H413	max. 0.7

*: with exposure limit

** The mineral oil mixture contains one or more of the following:

REACH Registr. Nr: 01-2119484627-25

REACH Registr. Nr: 01-2119471299-27

REACH Registr. Nr: 01-2119487077-29

*** Specific concentration limit:

Skin Sens. 1: C \geq 1.3%

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. In case of a complaint, call medical attention.

Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use soap. In case of a complaint, get medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. In case of a complaint, get medical attention.

Ingestion: If swallowed, give water. **Do not** induce vomiting. Get medical attention.

Protection of first-aid person: No data available.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

Prolonged and/or repeated contact may cause irritation on skin depending on individual sensitivity.

May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment need

Not required.



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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 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.



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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)

Universal engine oil.

SECTION 8 Exposure controls / personal protection

Engineering control measures:

Not required.

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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: brown, bright, clear
Odour: characteristic

Change in physical state:

Pour point (ISO 3016): typ. -39°C
Boiling point: not available

Others:

Flash point (COC) (EN ISO 2592): typ. 230°C
Ignition point (EN ISO 2592): not available
Autoignition temperature: not available
Explosive properties: not explosive



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Oxidizing properties:	not oxidize
Vapour pressure at 20°C:	negligible
Density at 15°C (EN ISO 12185):	0.864 – 0.884 g/cm ³
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. 98.1 mm ² /s
Kinematic viscosity at 100°C (EN ISO 3104):	typ. 14.5 mm ² /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:	LD ₅₀ (rat)	> 2000 mg/kg	(based on components)
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg	(based on components)



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Components:

Lubricating oils (petroleum), C18-C40:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	> 5.53 mg/L

Lubricating oils (petroleum), C24 - C50:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	> 5.53 mg/L

Distillates (petroleum), hydrotreated heavy paraffinic

Oral:	LD ₅₀ (rat)	> 2000 mg/kg	OECD 401
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg	OECD 402
Inhalation:	LC ₅₀ (rat)	> 5000 mg/m ³	OECD 403

Distillates (petroleum), dewaxed light paraffinic, hydrotreated:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	> 5.53 mg/L

Acute toxicity: irritation

Skin:	not irritant (based on components)
Eye:	causes serious eye irritation (based on components)

Respiratory or skin sensitisation: not sensitising (based on components), but may produce an allergic reaction

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



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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:	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 VwVwS)

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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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)

Eye Irrit. 2 H319 calculation method

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.
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 Sens 1, 1B	Respiratory/skin sensitization Category 1, 1B
Eye Dam. 1	Serious eye damage/eye irritation Category 1
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 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



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ECHA	European Chemicals Agency
Ec _x	Effective Concentration x%
ErC ₅₀	EC ₅₀ in terms of reduction of growth rate
Ed _x	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
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
LC _x	Lethal Concentration x%
LD _x	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
2	Hazards identification	23.03.2009	2
3 1-16	Composition / information on ingredients Other correction		
1-16	Regulatory information, other corrections	18.08.2010	3
3 9 1-16	Composition/information on ingredients Physical and chemical properties Revision modification according to 453/2010/EC	20.07.2012	4



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Revision Indicators:

Section	Subject of change	Date	Version
2 3 9 11 1-16	Hazards identification Composition/information on ingredients Physical and chemical properties Toxicological information Revision modification according to 1272/2008/EC	26.11.2012	5
2 3 11	Hazards identification Composition/information on ingredients Toxicological information	17.05.2013	6
3	Checking classification by CLP of components	07.06.2013	7
1 2 3 5 9 12 14 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Other hazards Composition/information on ingredients Fire hazards Physical and chemical properties Ecological information Transport information Other corrections	20.07.2015	8
2 3 9 12	Hazards identification Composition/information on ingredients Physical and chemical properties Ecological information	24.10.2016	9
3 9 12 1-16	Composition/information on ingredients Physical and chemical properties Ecological information Other corrections, revision modification according to 2015/830 /EU	15.02.2018	10
2 3 4 9 11 1-16	Hazards identification Composition/information on ingredients First aid measures Physical and chemical properties Toxicological information Other corrections	15.02.2019	11
2 3 11 12	Hazards identification Composition/information on ingredients Toxicological information Ecological information	11.05.2020	12