

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

MOL-LUB Ltd.

Trade name: MOL Dynamic Transit 15W-40 universal engine oil

Version: 8 Latest revision: 11. 09. 2017 Date of issue: 20. 06. 2007 Page: 1/(14)

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

1.1 Product identifier:

MOL Dynamic Transit 15W-40 universal engine oil

1.2 Relevant identified uses of the <u>mixture</u> 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 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, Nagyvárad 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.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting

effects.



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2.2 Label elements

> Product identification: Trade name: MOL Dynamic Transit 15W-40 universal engine oil

Hazardous components: -

GHS Pictogram:

Signal word: Warning

Hazard statement:

H319 Causes serious eye irritation.

Harmful to aquatic life with long lasting effects. H412

Supplemental hazard information: -

Precautionary statements – Prevention:

P280 Wear eye/face protection.

P273 Avoid release to the environment.

Precautionary statements – Response:

P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313If 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	CAS	Hazard classes and	Hazard	Conc.
Name	number	number	cat.	statements	%(m/m)
Base oil – unspecified,	265-157-1	64742-54-7	-	-	max. 80
hydrotreated heavy			(Note L)		
paraffinic, C20-C50*					
REACH Registr. Nr.:					
01-2119484627-25					
Distillates (petroleum),	265-169-7	64742-65-0	-	-	max. 80
solvent-dewaxed heavy			(Note L)		
paraffinic C20- C50*					
REACH Registr. Nr.:					
01-2119471299-27					
Lubricating oils	309-877-7	101316-72-7	-	-	max. 80
(petroleum), C24-C50*			(Note L)		
REACH Registr. Nr.:					
01-2119489969-06					
Lubricating oils	305-594-8	94733-15-0	-	-	max. 65
(petroleum), C18-40*			(Note L)		
REACH Registr.Nr.:					
01-2119486987-11					
Distillates (petroleum),	295-301-9	91995-40-3	Asp.Tox.1	H304	max. 10
dewaxed light			(Note L)		
paraffinic, hydrotreated					
REACH Registr.Nr.:					
01-2119488517-24					10
Mineral oil raffinate		mixture	-	-	max. 10
mixture*	272 020 2	60640.40.0	(Note L)	11215	1.2
Zinc alkyl	272-028-3	68649-42-3	Skin Irrit. 2	H315	max. 1.2
dithiophospate			Eye Dam. 1	H318	
Di 1 . 1 1	210 154 2	101150 50 5	Aquatic Chronic. 2	H411	0.2
Phenol, dodecyl-, branched	310-154-3	121158-58-5	Skin Corr. 1C Eye Irrit. 2	H314 H319	max. 0.3
				H361f	
REACH Registr.Nr.: 01-2119513207-49			Repr. 2 Aquatic Acute1	H400	
U1-41173134U1- 4 7			Aquatic Acuter Aquatic Chronic 1	H410 (M=10)	
			Aquatic Chronic I	11410 (141–10)	



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Name	EU	CAS	Hazard classes and	Hazard	Conc.
Name	number	number	cat.	statements	%(m/m)
O,O,O-triphenyl	209-909-9	597-82-0	Repr. 2	H361fd	max. 0.12
phosphorothioate			Aquatic Chronic 4	H413	

^{*:} with exposure limit

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 Remove contaminated clothing. Wash skin with large amounts of water, use

contact: 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 data available.

- 4.2 Most important symptoms and effects, both acute and delayed Eye irritation.
- 4.3 Indication of any immediate medical attention and special treatment need Not required.

SECTION 5 Fire-fighting measures

Fire hazards:

Combustible.



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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 <u>mixture</u> 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.

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.



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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.

Ensure washing facilities after working hours and before breaks. Take off contaminated or oil-soaked clothing, wash with warm water and soap.

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.

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: Breathing apparatus not required.

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.



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Eye protection: Tightly fitting safety goggles (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, clear, bright

Odour: characteristic

Change in physical state:

Pour point (ISO 3016): typ. -33°C not available

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): $0.875 - 0.895 \text{ g/cm}^3$

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

n-Octanol/water partition coefficient:

Vapour density:

Heating value:

Kinematic viscosity at 40°C (EN ISO 3104):

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

pH:

not available

inf. 38 000 kJ/kg

typ. 111.5 mm²/s

typ. 14.7 mm²/s

not applicable

9.2 Other information

no data available



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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 No dangerous decomposition products are formed under normal

products: conditions. Hazardous combustion products: See Section 5.

SECTION 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

 $\begin{array}{lll} \text{Oral:} & LD_{50} \ (\text{rat}) & > 2000 & \text{mg/kg} & \text{(based on components)} \\ \text{Dermal:} & LD_{50} \ (\text{rabbit}) & > 2000 & \text{mg/kg} & \text{(based on components)} \end{array}$

Acute toxicity: irritation

Skin: not irritant (based on components)

Note: Prolonged and/or repeated contact may cause irritation on skin depending

on individual sensitivity.

Eye: irritant (based on components), causes serious eye irritation

Respiratory or skin sensitisation: not sensitising (based on components)

Other information, specific effects:

The product does not contain PCBs, PCTs, and other chlorine compounds, and heavy metals, barium compounds.

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.



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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

Aquatic organisms:

Fish: $LC_{50} > 500 \text{ mg/l/96 h}$

Algae: EC₅₀ 137 mg/l

Daphnia: $EC_{50} > 100 \text{ mg/l/24 h}$ Daphnia: $EC_{50} = 82 \text{ mg/l/48 h}$

Soil organisms:

Plants:

12.2 Persistence and degradability No data available.

Biodegradability: No data available. Bioaccumulative potential No data available.

12.4 Mobility

12.3

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: Harmful to aquatic life with long lasting effects.

Water hazard class (German): WGK 2 (Classification by VwVwS)



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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.

SECTION 14 Transport information

Land transport:

Road/ Railway ADR/RID: Not classified.

14.1. UN number:

14.2. UN proper shipping name: -

14.3. Transport hazard class(es): -

14.4. Packing group:

14.5. Environmental hazards:

14.6. Special precautions for user:

Waterways:

Inland waterways/ Sea transport ADN/IMDG: Not apply to the product.

Air transport: ICAO / IATA: Not apply to the product.



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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 regulation and EU directives

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

Eye Irrit. 2 H319 (calculated method) Aquatic Chronic 3 H412 (based on test data)



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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.
H361f Suspected of damaging fertility.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn

child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.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 Eye Irrit. 2 Serious eye damage/eye irritation Category 2

Repr. 2 Reproductive toxicity Category 2

Aquatic Acute 1 Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, Chronic Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, Chronic Category 2
Aquatic Chronic 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 Biocontrentration Factor
BOD Biological Oxygen Demand

Bw Body Weight

C&L Classification and Labeling CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (1272/2008/EC)

CMR Carcigonic, Mutagenic or toxic to Reproduction

COD Chamical Oxygen Demand CSA Chemical Safety Assessment CSR Chemical Safety Report



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DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
ECHA European Cheamicals 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

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%) Halálos dózis 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	Composition / information on ingredients	21.01.2009	2
16	The full text of each relevant R phrase in Section 3.		
	Other correction		



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Section	Subject of change	Date	Version
3	Composition / information on ingredients	11.01.2010	3
9	Physical and chemical properties		
	Other corrections		
1-16	Regulatory information, other corrections	18.08.2010	4
3	Composition/information on ingredients	20.07.2012	5
9	Physical and chemical properties		
1-16	Revision modification according to 453/2010/EC		
2	Hazards identification	30.11.2012	6
3	Composition/information on ingredients		
9	Physical and chemical properties		
11	Toxicological information		
1-16	Revision modification according to 1272/2008/EC		
1	Details of the supplier of the safety data sheet,	17.07.2015	7
	Responsible for SDS		
2	Other hazards		
3	Composition/information on ingredients		
5	Fire hazards		
9	Physical and chemical properties		
14	Transport information		
1-16	Other corrections, regulatory information		
2	Hazards identification	11.09.2017	8
3	Composition/information on ingredients		
9	Physical and chemical properties		
12	Ecological information		
1-16	Other corrections, regulatory information		