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

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

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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

Emergency telephone (on workdays: 07-15²⁰ h (CET)): +36 34 526 210 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 <u>mixture</u> or substance		
	Hazard Class and Category:	Hazard staten	ment:
	Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.



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2.2	Label elements			
	Product identification:		MOL Dynamic Transit 10W-40 universal e oil	engine
	Hazardous components:	-		
	GHS Pictogram: Signal word:	Not required. Not required.		
	Hazard statement: H412	Harmful to aq	uatic life with long lasting effects.	
	Supplemental hazard info EUH208	Contains Be	enzenesulfonic acid, mono-C16-24-alkyl d May produce an allergic reaction.	erivs.,
	Precautionary statements P273		to the environment.	
	Precautionary statements	- Response: -		
	Precautionary statements	- Storage: -		
	Precautionary statements P501	1	contents/container in accordance with na	ational
	Other liabilities for labelli Tactile warning of danger Transport classification:	r: Not requ	ired.	
2.3	Other hazards The product does not coregulation (EC) 1907/2000	•	T or vPvB substance according to annex XI	II of

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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixture

Mixture of refined mineral base oils containing additives.

Component(s) / Hazardous component(s):

NT	EU	CAS	Hazard classes and	Hazard	Conc.
Name	number	number	cat.	statements	%(m/m)
Lubricating oils (petroleum), C24-C50* REACH Registr. Nr.: 01-2119489969-06	309-877-7	101316-72-7	(Note L)	-	max. 60
Lubricating oils (petroleum), C18-40* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	(Note L)	-	max. 60
Distillates (petroleum), solvent-dewaxed heavy paraffinic C20- C50* REACH Registr. Nr.: 01-2119471299-27	265-169-7	64742-65-0	- (Note L)	-	max. 50
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50*	265-157-1	64742-54-7	(Note L)	-	max. 50
Base oil – unspecified, hydrotreated neutral oil- based, C20-C50*	276-738-4	72623-87-1	- (Note L)	-	max. 20
Base oil – unspecified, hydrotreated neutral oil- based, C20-C50*	276-738-4	72623-87-1	Asp. Tox. 1 (Note L)	H304	max. 15
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50*	265-157-1	64742-54-7	Asp. Tox. 1 (Note L)	H304	max. 15
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*, **		mixture	Asp. Tox. 1 (Note L)	H304	max. 6



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N	EU	CAS	Hazard classes and	Hazard	Conc.
Name	number	number	cat.	statements	%(m/m)
Phosphorodithioic acid, mixed O,O-bis(1,3-	283-392-8	84605-29-8	Skin Irrit. 2 Eye Dam. 1	H315 H318	max. 1.2
dimethylbutylandiso-Pr) esters, zinc salts*** REACH Registr. Nr.: 01-2119493626-26			Aquatic Chronic 2	H411	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calciumsalts REACH Registr. Nr.: 01-2119492616-28	274-263-7	70024-69-0	Skin Sens. 1B	H317	max. 0.6
O,O,O-triphenyl phosphorothioate	209-909-9	597-82-0	Repr. 2	H361fd	max. 0.15
Phenol, dodecyl-, branched REACH Registr.Nr.: 01-2119513207-49	310-154-3	121158-58-5	Skin Corr. 1C Eye Dam. 1 Repr. 1B Aquatic Acute 1 Aquatic Chronic 1	H314 H318 H360F H400 (M=10) H410 (M=10)	max. 0.04

*: with exposure limit

** The mineral oil mixture contains one or more of the following: EU Nr.: 265-157-1 REACH Registr.Nr.: 01-2119484627-25 EU Nr.: 265-169-7 REACH Registr.Nr.: 01-2119471299-27 EU Nr.: 265-158-7 REACH Registr.Nr.: 01-2119487077-29 EU Nr.: 265-159-2 REACH Registr.Nr.: 01-2119480132-48

*** Specific concentration limit: Skin Irrit. 2; : 6.25 % \leq C \leq 100 %; Eye Irrit. 2; : 10 % < C \leq 12.5 %; Eye Dam. 1; : 12.5 % < C \leq 100 %

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.



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Inhalation: Remove the affected person to fresh air. Get 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. Immediately get medical attention.

Protection of first-aid person: No data available.

 4.2 Most important symptoms and effects, both acute and delayed May produce an allergic reaction. 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 need 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 <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.

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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

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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 in case of adequate ventilation. 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	I Information on basic physical and chemical properties	
	Appearance:	
	Physical state:	liquid
	Colour:	brown, clear
	Odour:	characteristic

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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 Oxidizing properties: not oxidize Vapour pressure at 20°C: negligible Density at 15°C (EN ISO 12185): $0.864 - 0.884 \text{ g/cm}^3$ 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 mm²/s Kinematic viscosity at 100°C (EN ISO 3104): typ. 14.49 mm²/s not applicable pH:

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.



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SECTION 11 Toxicological information					
11.1	Information on Acute toxicity:	toxicological effect	ets		
	Oral:	LD_{50} (rat)	> 2000	mg/kg	(based on components)
	Dermal:	LD ₅₀ (rabbit)	> 2000	mg/kg	(based on components)
	Acute toxicity: Skin: Eye:	irritation not irritant (bas not irritant (bas		,	
	Respiratory or s	kin sensitisation:		sitising (ba an allergic	ased on components), but may reaction
	Other information	on, specific effects	5:		
Note L: The classification as a carcinogen need not apply accord because it can be shown that the substance contains less than 3 measured by IP 346.					
	Germ cell m Carcinogenic			own, resp.	mutagen (based on components) not carcinogen (based on
	Reproductive	e toxicity:	not know	,	no reproduction-damaging effect ts)
	STOT-single	exposure:	not classi	•	
	_	ted exposure:	not classi		
	Aspiration ha	azard:	not classi	ified	
SEC	TION 12 Ecol	logical informatio	n		
12.1	Toxicity		No data a	available for	the product.
	Aquatic orga Soil organism				-

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

Plants:



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12.3	Bioaccumulative potential	No data available.
12.4	Mobility	
	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)

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.



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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: Transport hazard class(es): 14.3. 14.4. Packing group: Environmental hazards: 14.5. Special precautions for user: 14.6. 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 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.



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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)

Aquatic Chronic 3 H412 calculated

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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360F	May damage fertility.
H361fd	
H30110	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.
Asp. Tox. 1	Aspiration hazard Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens 1B	Respiratory/skin sensitization Category 1B
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 1B	Reproductive toxicity Category 1B
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
1	······································



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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
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%
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
ррт РЕАСИ	parts/million Pagiotration Evoluation Authorization and Pastriction of Chamicals
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International carriage of Dangerous Goods by Rail

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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
VI VB	very reission and very his accumulative

Revision Indicators:

Section	Subject of change	Date	Version
2	Hazards identification	23.03.2009	2
3	Composition / information on ingredients		
1-16	Other correction		
1-16	Regulatory information, other corrections	18.08.2010	3
3	Composition/information on ingredients	20.07.2012	4
9	Physical and chemical properties		
1-16	Revision modification according to 453/2010/EC		
2	Hazards identification	26.11.2012	5
3	Composition/information on ingredients		
9	Physical and chemical properties		
11	Toxicological information		
1-16	Revision modification according to 1272/2008/EC		
2	Hazards identification	17.05.2013	6
3	Composition/information on ingredients		
11	Toxicological information		
3	Checking classification by CLP of components	07.06.2013	7
1	Details of the supplier of the safety data sheet, Responsible	20.07.2015	8
	for SDS		
2	Other hazards		
3	Composition/information on ingredients		
5	Fire hazards		
9	Physical and chemical properties		
12	Ecological information		
14	Transport information		
1-16	Other corrections		
2	Hazards identification	24. 10. 2016	9
3	Composition/information on ingredients		
9	Physical and chemical properties		
12	Ecological information		



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Section	Subject of change	Date	Version		
3	Composition/information on ingredients	15.02.2018	10		
9	Physical and chemical properties				
12	Ecological information				
1-16	Other corrections, revision modification according to				
	2015/830 /EU				
2	Hazards identification	15.02.2019	11		
3	Composition/information on ingredients				
4	First aid measures				
9	Physical and chemical properties				
11	Toxicological information				
1-16	Other corrections				