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



Version: 10 Latest revision: 15. 02. 2018 Date of issue: 20. 06. 2007

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

1.1 Product identifier: MOL Dynamic Transit 10W-40 universal engine oil 1.2 Delementifier in the state of the

- 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 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 (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

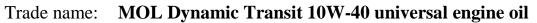
2.1	Classification of the <u>mixture</u> or substance		
	Hazard Class and Category:	Hazard statement:	
	Eye Irrit. 2	H319	Causes serious eye irritation.
	Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.



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acco	ording to regula		/EC (REACH) and			LUB Ltd.
	ade name:	•		t 10W-40 unive	e	
Ver	sion: 10	Latest revis	sion: 15. 02. 201	8 Date of issue: 2	0. 06. 2007	Page: 2/(14)
2.2	Label elem	ients				
	Product ide	entification:		MOL Dynamic T oil	ransit 10W-40) universal engine
	Hazardous	components:	-			
	GHS Picto	gram:	(!)			
	Signal wor	d:	Warning			
	Hazard stat H319 H412	tement:		s eye irritation. uatic life with long	lasting effects.	
	Supplemental hazard inf EUH208		Contains Ber	nzenesulfonic acid May produce an all		24-alkyl derivs.,
	Precautionary statement P280 P273		Wear eye/face	protection. to the environment		
		ary statement 51 + P338		Rinse cautiously ct lenses, if present		or several minutes. . Continue rinsing.
	P337 + P3	13	If eye irritation	n persists: Get medi	ical advice/atter	ntion.
Precautionary statements – S		s – Storage: -				
	Precaution P501	ary statement	s – Disposal: Dispose of regulation.	contents/container	in accordan	ce with national
	Tactile was	lities for labe rning of dang classification:		ired.		

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



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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	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	Asp.Tox.1 (Note L)	H304	max. 50
Lubricating oils (petroleum), C18-40* REACH Registr.Nr.: 01-2119486987-11	305-594-8	94733-15-0	(Note L)	-	max. 50
Distillates (petroleum), solvent-dewaxed heavy paraffinic C20- C50* REACH Registr. Nr.: 01-2119471299-27	265-169-7	64742-65-0	- (Note L)	-	max. 45
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50* REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	(Note L)	-	max. 40
Lubricating oils (petroleum), C ₂₀₋₅₀ , hydrotreated neutral oil- based	276-738-4	72623-87-1	Asp. Tox. 1 (Note L)	H304	max. 30
Base oil – unspecified, hydrotreated heavy paraffinic, C20-C50* REACH Registr. Nr.: 01-2119484627-25	265-157-1	64742-54-7	Asp. Tox. 1 (Note L)	H304	max. 15



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Name	EU	CAS	Hazard classes and	Hazard	Conc.
	number	number	cat.	statements	%(m/m)
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					
Mineral oil raffinate		mixture	-	-	max. 6
mixture*			(Note L)		
Phosphorodithioic acid,	283-392-8	84605-29-8	Skin Irrit. 2	H315	max. 1.2
mixed O,O-bis(1,3-			Eye Dam. 1	H318	
dimethylbutyl and iso-Pr)			Aquatic Chronic 2	H411	
esters, zinc salts					
REACH Registr.Nr.:					
01-2119493626-26					
Benzenesulfonic acid,	274-263-7	70024-69-0	Skin Sens. 1B.	H317	max. 0.6
mono-C16-24-alkyl					
derivs., calcium salts					
REACH Registr.Nr.:					
01-2119492616-28					
O,O,O-triphenyl	209-909-9	597-82-0	Repr. 2	H361fd	max. 0.12
phosphorothioate			Aquatic Chronic 4	H413	
Phenol, dodecyl-,	310-154-3	121158-58-5	Skin Corr. 1C	H314	< 0.04
branched			Eye Dam. 1	H318	
REACH Registr.Nr.:			Repr. 1B	H360F	
01-2119513207-49			Aquatic Acute1	H400 (M=10)	
			Aquatic Chronic 1	H410 (M=10)	

*: 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.
 - SkinRemove contaminated clothing. Wash skin with large amounts of water, usecontact: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.

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

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MOL

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Protection of first-aid person: No data available.

- 4.2 Most important symptoms and effects, both acute and delayed Eye irritation. Sensitising.
- 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.

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.

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

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6.3	On soil:	naterial for containment and cleaning up 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 o	ther sections	
	-	ecautions: see section 8. ment methods: see section 13.	
SEC	TION 7 Hand	lling 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.		
SEC	TION 8 F	Exposure controls / personal protection	
	Engineering co Not require	ontrol measures: d.	
8.1	Control param	eters:	
	Mineral oil	TWA: 5 mg/m ³ ; STEL: 10 mg/m ³ , for oil mist, vapour	

excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

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



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8.2	Exposure controls Personal protection: Respiratory protection: Hand protection: Eye protection: Skin protection: Other special:	Breathing apparatus not required. 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. Tightly fitting safety goggles (EN 166). Protective clothing (oil resistant). no data		
	Environmental exposure cor Do not discharge into dra		undwater	
	·	emical properties		
9.1	Information on basic physics	al and chemical proper	ties	
	Appearance:		1 1	
	Physical state:		liquid	
	Colour:		brown, bright, clear	
	Odour:		characteristic	
	Change in physical state:		2000	
	Pour point (ISO 3016):		typ39°C	
	Boiling point:		not available	
	Others:		22000	
	Flash point (COC) (EN		typ. 230°C	
	Ignition point (EN ISO 2		not available	
	Autoignition temperatur	re:	not available	
	Explosive properties:		not explosive	
	Oxidizing properties:		not oxidize	
	Vapour pressure at 20°C		negligible	
	Density at 15°C (EN ISC	3 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:	000 (EN 100 2104)	inf. 38 000 kJ/kg	
	Kinematic viscosity at 4		not available	
	Kinematic viscosity at 1	$00^{\circ}C$ (EN ISO 3104):		
	pH:		not applicable	

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



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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 No dangerous decomposition products are formed under normal products: conditions. Hazardous combustion products: See Section 5. **Toxicological information SECTION 11** 11.1 Information on toxicological effects Acute toxicity: Oral: LD_{50} (rat) > 2000mg/kg (based on components) LD₅₀ (rabbit) > 2000 (based on components) Dermal: mg/kg Acute toxicity: irritation Skin: not irritant (based on components) Prolonged and/or repeated contact may cause irritation on skin depending Note: on individual sensitivity. irritant (based on components), causes serious eye irritation Eye: Respiratory or skin sensitisation: not sensitising (based on components), but may produce an allergic reaction 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.

Γ

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



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	Germ cell mutagenicity:not known, resp. not mutagen (based on component not known, resp. not carcinogen (based components)Reproductive toxicity:not known, resp. not carcinogen (based components)Reproductive toxicity:not known, resp. no reproduction-damaging e (based on components)STOT-single exposure:not classified not classified not classifiedSTOT-repeated exposure:not classified not classifiedAspiration hazard:not classified		
SEC	TION 12 Ecological information		
12.1	Toxicity Aquatic organisms: Fish: Algae: Daphnia: Daphnia: Soil organisms: Plants:	$\begin{array}{ll} LC_{50} &> 500 \ mg/l/96 \ h \\ EC_{50} & 137 \ mg/l \\ EC_{50} &> 100 \ mg/l/24 \ h \\ EC_{50} & 82 \ mg/l/48 \ h \end{array}$	
12.2	Persistence and degradability Biodegradability:	No data available. No data available.	
12.3	Bioaccumulative potential	No data available.	
12.4	Mobility Mobility in soil Mobility in water:	Absorbs in soil. 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: PCT, PCB and other chlorinated	None.	
	hydrocarbons: Environmental effects: Water hazard class (German):	None. Harmful to aquatic life with long lasting effects. WGK 3 (Classification by VwVwS)	

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



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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

L	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:	-		
W	/aterways:			
Inland waterways/ Sea transport		ADN/IMDG:	Not apply to the product.	
	Air transport: ICAO / IATA:		Not apply to the product.	

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

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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)

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



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The full text of each relevant H- phrase and Hazard classes and cat. in Section 3.:

May be fatal if swallowed and enters airways.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Causes serious eye damage.
May damage fertility.
Suspected of damaging fertility. Suspected of damaging the unborn child.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.
May cause long lasting harmful effects to aquatic life.
Aspiration hazard Category 1
Skin corrosion/irritation Category 1C
Respiratory/skin sensitization Category 1B
Serious eye damage/eye irritation Category 1
Reproductive toxicity Category 1B
Reproductive toxicity Category 2
Hazardous to the aquatic environment, Acute Category 1
Hazardous to the aquatic environment, Chronic Category 1
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	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
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		

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Section	Subject of change	Date	Version
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		
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		