

**MATERIAL SAFETY DATA SHEET**  
**(1907/2006/EC)**

**MOL-LUB Ltd.**

Trade name: **MOL EcoClean-S engine degreaser**

Version: 3

Latest revision: 27. 04. 2010

Date of issue: 14. 12. 2009

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**1. Identification of the substance / preparation and of the company**

Product name:

MOL EcoClean-S

Product type / recommended uses:

preparation / engine degreaser

Manufacturer / Supplier identification:

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

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 HSE and QOP

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Technical information:

MOL-LUB Ltd. Product Development and Technical Service

H-1117 Budapest, Október huszonharmadika utca 18., Hungary

Phone/Fax: +36 80 201 296 or +36 1 464 0236 / +36 1 464 0304

Emergency telephone (07-15<sup>20</sup> h): +36 34 526 210

Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)

Tel.: +36 1 476 6464, or +36 80 201 199

**2. Hazards identification**

Human health hazards:

R 65

R 66

Xn (harmful)

Harmful: may cause lung damage if swallowed

Repeated exposure may cause skin dryness or cracking

Safety hazards:

Danger symbol not required.

Environmental hazards:

R 52

Danger symbol not required.

Harmful to aquatic organisms

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### 3. Composition / information on ingredients

Chemical description: Naphtha with additives and colorific.

Ingredients / Hazardous components:

Name	EINECS number	CAS number	Hazard symbol	Risk phrase	Conc. %(m/m)
Naphtha (petroleum) C6-C13*	265-150-3	64742-48-9	Xn (Note P)	R 52, R 65, R 66	90-100
Fatty alcohol polyglycoether	226-097-1	68920-66-1	Xi	R 38	max. 10

\*: with exposure limit

The full text of each relevant R phrase see in Section 16.

### 4. 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. Get medical help on site. If breathing has stopped, apply artificial breathing or breathing apparatus.

Skin contact: Wash skin with large amounts of water, use soap. Remove contaminated clothing. 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: **Do not** induce vomiting. Get medical attention.

Note to physician:

### 5. Fire-fighting measures

Fire hazards:

Moderately hazardous (see also Section 9 - flash point).

Suitable extinguishing media:

Foam, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:

Water jet.

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Hazardous decomposition products:

On burning, carbon monoxide, carbon dioxide, various hydrocarbons and soot can be formed.

Special protective equipment:

According to the existing fire-fighting regulations (self-contained breathing apparatus).

Further information:

-

## **6. Accidental release measures**

Personal precautions:

See Section 8.

Environmental precautions:

Prevent spills from entering into natural water, soil and drains by containing the liquid. All kind of ignition sources should be remove. Notify relevant authority.

Clean-up procedures / recovery

On soil: Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid by pumping. Dispose of according to local regulations.

On water: Notify local authorities according to regulations.

## **7. Handling and storage**

Handling:

Keep general measures applied for normal operations with flammable liquids.

Ensure adequate ventilation.

Keep away from radiant heat and open flame.

Avoid contact with material, eye contact and the inhalation of vapors.

When using do not eat, drink or smoke. Avoid splashing the product.

Handling temperature:

Storage:

Store in dry, well ventilated place in original, closed containers.

Keep away from radiant heat, open flame and strong oxidizing agents.

Prevent electrostatic discharges.

Storable in containers made of carbon steel, stainless steel and most metals.

Storage temperature: max. 30°C

Specific application:

See product sheet.

## **8. Exposure controls / personal protection**

Engineering control measures:

Adequate ventilation.

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Exposure limits:

UK: TWA, 8 hours =1200 mg/m<sup>3</sup>

Personal protection:

Respiratory protection: Breathing apparatus not required in case of adequate ventilation.

Where concentrations in air may exceed the limits given in this section, it is recommended to use a half face filter mask(EN 141 type A) or breathing apparatus to protect from overexposure by inhalation.

Hand protection: Protecting gloves: should be solvent-resistant (e.g. nitrile rubber, penetration time >480 min). General requirements of gloves are described in standard EN 240.

Eye protection: Protective goggles not required.

Skin protection: Protective clothing: should be solvent resistant.

Other special:

General protective measures / hygiene:

Avoid contact with skin and eyes. Avoid prolonged breathing of vapours.

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

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

## 9. Physical and chemical properties

Appearance:

Physical state:	liquid
Colour:	light green, clear
Odour:	characteristic, mild

Change in physical state:

Melting point:

Boiling point:

Others:

Flash point (PM) (EN ISO 2592):	typ. 61°C
Ignition point (EN ISO 2592):	250°C
Autoignition temperature:	not available
Explosive properties:	Formation of explosive air/steam mixtures is possible.

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Oxidizing properties:

Vapour pressure at 20°C:

Density at 15°C (EN ISO 12185): 0,78 – 0,81 g/cm<sup>3</sup>

Solubility in water: forms emulsion like milk

Solubility in other solvents:

n-Octanol/water partition coefficient:

Vapour density (air=1): >3

Evaporation rate: not available

Heating value:

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

pH: not applicable

## 10. Stability and reactivity

Stability: No decomposition if stored and handled properly.

Conditions to avoid: Direct heat or ignition sources.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition products: On burning, carbon monoxide, carbon dioxide, various hydrocarbons and soot can be formed.

Notes:

## 11. Toxicological information

Acute toxicity:

Oral: LD<sub>50</sub> (rat) > 2000 mg/kg (based on components)

Note: Harmful: may cause lung damage if swallowed

Dermal: LD<sub>50</sub> (rabbit) > 2000 mg/kg (based on components)

Acute toxicity: irritation

Skin: not irritant (based on components)

Eye: not irritant (based on components).

Note: Prolonged and/or repeated contact may cause irritation on skin or in eyes depending on individual sensitivity.

Sensitization: not sensitising (based on components)

Chronic toxicity: not known

Other information, specific effects:

The naphtha contains less than 0,1 % w/w benzene (EINECS No 200-753-7), therefore the classification as a carcinogen need not apply according to 67/548/EEC NOTE P.

Carcinogen effect: not known, resp. not carcinogen (based on components)

Mutagen effect: not known, resp. not mutagen (based on components)

Reproduction-damaging effect: not known, resp. no reproduction-damaging effect (based on components)

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## 12. Ecological information

Mobility:	Evaporates easily from the soil and water. If leaked on soil the material reaches ground water, soluble components may easily spread.		
Degradability / persistence:	Biodegradable.		
Biodegradability:	Biodegradable.		
Bioaccumulative potential:	No data for the product. The material has a potential to bioaccumulate, however metabolic processes may decrease accumulation. logK <sub>OW</sub> : 2.1-6 (literature, naphtha); 5.5 – 6 (calculated for naphtha)		
Ecotoxicity:	No data for the product.		
<i>Naphtha</i> :			
Aquatic organisms:	Fishtest (Brachidanio rerio):	LC <sub>50</sub>	> 1000 mg/l
	Fishtest (Rainbow trout):	LC <sub>50</sub>	> 35 mg/l/96 h
	Daphnia (Daphnia magna):	LC <sub>50</sub>	10 mg/l/48 h
	Algae (Selenastrum capricornutum):	EC <sub>50</sub>	260 mg/l
Bacteria:	(Azobacter agile):	EC <sub>50</sub>	> 1000 mg/l/48 h
	(Pseudomonas putida):	EC <sub>50</sub>	> 1000 mg/l/48 h
Plants:			
Biological oxygen demand:			
Chemical oxygen demand:			
Heavy metal content:	None.		
PCT, PCB and other chlorinated hydrocarbons:	None.		
Environmental effects:	Harmful to aquatic organisms.		
Water hazard class (German):			

## 13. Disposal considerations

### Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.

EWC cod: 14 06 03\*

Other solvents and solvent mixtures.

Disposal must be in compliance with national and local regulations.

### Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

EWC cod: 15 01 10\*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

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**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.

#### 14. Transport information

**Land transport:**

Road/ Railway	ADR/RID:	Not classified.	
	Classe:	3	Classe cod: F1
	Packaging group:	III	
	Lim. quant.:	LQ7	
	Kemmler number:	30	
	UN number:	3295	
	Proper Shipping Name:	LIQUID HYDROCARBONS	

**Waterways:**

Inland waterways/ Sea transport	ADN/IMDG:	Not classified.
	Marine pollutant:	no

Air transport:	ICAO / IATA:	Not classified.
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#### 15. Regulatory information

Classification and labelling according to EU directives [67/548/EEC and 1999/45/EC (existing versions)] and to Hungarian regulation [44/2000. (XII. 27.) EüM rendelet (existing version)] for hazardous substances and hazardous preparations:

Danger symbol(s) and indication(s):



Hazardous substance(s): Naphtha

The packaging must bear the inscription: -

R-phrases:	R 65	Harmful: may cause lung damage if swallowed
	R 66	Repeated exposure may cause skin dryness or cracking
	R 52	Harmful to aquatic organisms

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S-phrases: S 2 Keep out of the reach of children  
S 23 Do not breathe vapour/spray  
S 24 Avoid contact with skin  
S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label  
S 60 This material and its container must be disposed of as hazardous waste  
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets

Tactile warning of danger: In case of distribution for population

Other duties for labelling:  
By ADR/RID

## 16. Other information

Recommended application / restrictions:  
See product sheets.

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.

This safety data sheet has been prepared according to Regulation (EC) No 1907/2006, Directives 1999/45/EC.

Source of data presented in this material safety data sheet:  
Test results of this product  
Material safety data sheets of product's components  
Hungarian and EU lists of dangerous substances  
Relevant Hungarian regulation and EU directives  
CONCAWE database



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*The full text of each relevant R phrase in Section 3.:*

R 38            Irritating to skin  
R 52            Harmful to aquatic organisms  
R 65            Harmful: may cause lung damage if swallowed  
R 66            Repeated exposure may cause skin dryness or cracking

Revision Indicators:

Section	Subject of change	Date	Version
3	Composition / information on ingredients	11.02.2010	2
9	Physical and chemical properties		
1	Product name	27.04.2010	3