



SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

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

Version: 5 Latest revision: 05. 01. 2016 Date of issue: 14. 12. 2009 Page: 1/(14)

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

- 1.1 Product identifier:
MOL EcoClean-S engine degreaser
- 1.2 Relevant identified uses of the mixture or substance and uses advised against
Relevant identified uses: engine degreaser
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:



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Section 2 Hazards identification

2.1 Classification of the mixture or substance

Hazard Class and Category: Hazard statement:
Asp.Tox. 1 H304 May be fatal if swallowed and enters airways.

2.2 Label elements

Product identifier:

Trade name: **MOL EcoClean-S engine degreaser**
Hazardous component(s): Hydrocarbons, C-10-C13 (EU: 918-481-9)

GHS Pictogram:



Signal word: **Danger**

Hazard statement:

H304 May be fatal if swallowed and enters airways.

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements – General: -

Precautionary statements – Prevention:

P210 Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
P273 Avoid release to the environment.

Precautionary statements – Response:

P301 + P310 + P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Precautionary Statements – Storage:

P405 Store locked up.
P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary statements – Disposal:

P501 Dispose of contents/container in accordance with national regulation.



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Other liabilities for labelling:

Tactile warning of danger: In case of distribution for population.

Transport classification: see section 14.

By 648/2004/EC regulation:

Components: > 30 % aliphatic hydrocarbons, < 5 % non-ionic surfactants

Contain: colorant

The website, where the list of ingredients is available: www.kenoanyag.mol.hu

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: Hydrocarbons with additives and colorific.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Hydrocarbons, C10- C13, n-alkanes, n-alkanes, isoalkanes, cyclics, < 2 % aromatics REACH registration Nr.: 01-2119457273-39	918-481-9	-	Asp.Tox. 1 Flam.Liq. 3 (Note P)	H304 H226	90 – 97
Fatty alcohol polyglycoether, ethoxylated	226-097-1	68920-66-1	Skin Irrit. 2	H315	< 10

The full text of each relevant H- phrase, 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 help on site. Give supplemental oxygen, if breathing is difficult. 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.
Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention immediately. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

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 immediately.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion: impaired consciousness, disorientation

Inhalation: headache, dizziness, vomiting, altered mental status

Skin: redness, irritation

Eye: slight irritation

4.3 Indication of any immediate medical attention and special treatment need

In case of ingestion.

In case of high-velocity injection under the skin.

Section 5 **Fire-fighting measures**

Fire hazards:
Combustible.

5.1 Extinguishing media

Suitable extinguishing media:

Foam, carbon dioxide, dry chemical powder, sand, earth, water spray.

Unsuitable extinguishing media:

Water jet.



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5.2 Special hazards arising from the mixture or substance

Hazardous combustion products:

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

5.3 Advice for fire-fighters

Special protective equipment:

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

Further information:

Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back.

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.

Keep unnecessary personnel away considering the direction of wind.

6.2 Environmental precautions:

Prevent spills from entering into natural water, soil and drains by containing the liquid.

Notify relevant authority.

6.3 Methods and material for containment and cleaning up

On soil: All kind of ignition sources should be remove. Ensure adequate ventilation.
Stop leak if you can do so without risk. Recover free liquid by pumping.
Contain spilled liquid with sand, earth or other suitable absorbents.
Dispose of according to local regulations.

On water: 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 chemicals and flammable liquids.

Ensure adequate ventilation.

Avoid to accumulate electrostatic charge. Use non-sparking tools.

Avoid splashing product.

Avoid contact with skin and eyes, inhalation of vapours, aerosol, mist.

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

When using do not eat or drink and do not smoke.

Handling temperature: not known

7.2 Conditions for safe storage, including any incompatibilities

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

Protect from direct sunshine.

Prevent electrostatic discharges.

Empty containers retain product residue (solid, liquid, and/or vapour) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

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

Storage temperature: 5 - 30°C

7.3 Specific end use(s)

Engine degreaser.

Section 8 Exposure controls / personal protection

Engineering control measures:

Adequate ventilation.

8.1 Control parameters: -



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8.2 Exposure controls

Personal protection:

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

In case of inadequate ventilation use suitable mask with filter typ A (EN 141).

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 374.

Note: Manufacturer's directions for use and the conditions of application should be observed.

Eye protection: Protective goggles, if splashes may occur.

Skin protection: Protective clothing.

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: light green, clear
Odour: light odor of gasoline

Change in physical state:

Freezing point(EN ISO 3016): not available
Boiling point/range: 180-220°C

Others:

Flash point (PM) (EN ISO 2719): typ. 61°C
Ignition point (COC): typ. 250°C
Autoignition temperature: not applicable
Explosive properties: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Flammable Limits (volume % in air): 0.6 vol% / 6.5 vol%



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Decomposition Temperature	not data available
Oxidizing properties:	not data available
Vapour pressure at 20°C:	not data available
Vapour density (air=1):	not data available
Density at 15°C:	0.789-0.810 g/cm ³
Solubility in water:	form emulsion like milk
n-Octanol/water partition coefficient:	not available
Kinematic viscosity (EN ISO 3104)	not available
pH at 20°C:	not data available

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:	No data for the product.
Oral:	No data.
Note:	May be fatal if swallowed and enters airways.
Dermal:	No data.
Inhalation:	No data.



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Components:

Hydrocarbons, C10- C13:

Oral:	LD ₅₀ (rat)	5000	mg/kg
Dermal:	LD ₅₀ (rabbit)	3160	mg/kg
Inhalation:	No data.		

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.

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

Other information, specific effects:

Note P: The classification as a carcinogen or mutagen need not apply according to 1272/2008/EC, because it can be shown that the substance contains less than 0,1 % w/w benzene (EU No 200-753-7).

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 No data for the product.

Components:

Hydrocarbons, C10- C13:

Aquatic organisms:	10-100 mg/l
Soil organisms:	No data.
Plants:	No data.

12.2 Persistence and degradability No data for the product.

Biodegradability:

Fatty alcohol polyglycolether, ethoxylated 73 % (OECD 301 B)



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12.3	Bioaccumulative potential	No data for the product. <i>Hydrocarbons, C10- C13:</i> Log Pow 2,1 – 6 ((Literature) Log Kow 5,5 – 6 (calculated)
12.4	Mobility Mobility in water: Mobility in soil:	Evaporates easily from the water. Evaporates easily from the soil. If leaked on soil the material reaches ground water, soluble components may easily spread.
12.5	Results of PBT and vPvB assessment	Does not contain PBT and vPvB substances.
12.6	Other adverse effects Environmental effects: Water hazard class (German):	Large spills may be hazardous to the environment. <i>Hydrocarbons, C10- C13:</i> Not damaging to the ozone layer. 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: 14 06 03*

Other solvents and solvent mixtures.

Waste Identification Code: 20 01 29*

Detergents containing dangerous substances.

Disposal must be in compliance with national and local regulations.

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.



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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.

Section 14 Transport information

Land transport:

Road/ Railway	ADR/RID:
14.1. UN number:	3295
14.2. UN proper shipping name:	LIQUID HYDROCARBONS
14.3. Transport hazard class(es):	3
Class code:	F1
14.4. Packing group:	III
Hazard label:	3
14.5. Environmental hazards:	-
14.6. Special precautions for user:	
Kemmler Nr.:	30

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



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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
- Hungarian and EU lists of dangerous substances
- Relevant Hungarian regulation and EU directives

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

Asp.Tox. 1 H304 (calculation method)

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

- | | |
|---------------|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| Flam.Liq. 3 | Flammable liquid Category 3 |
| Asp.Tox. 1 | Aspiration hazard Category 1 |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |



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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	Bioconcentration 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	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
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%) 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



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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 9	Composition / information on ingredients Physical and chemical properties	11.02.2010	2
1	Product name	27.04.2010	3
2 3 9 12 1-16	Hazards identification. Composition/information on ingredients. Physical and chemical properties Ecological information Regulatory information, other corrections. Revision modification according to 1272/2008/EC and 453/2010/EC	11.09.2012	4
1 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Other corrections, revision modification according to 2015/830 /EC	05.01.2016	5