

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

Trade name: MOL Eco Clean-S engine degreaser

Version: 6 Latest revision: 22. 03. 2019 Date of issue: 14. 12. 2009 Page: 1/(13)

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 (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:

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



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2.2 Label elements

Product identification: Trade name: MOL EcoClean-S engine degreaser

Hazardous component(s): Hydrocarbons, C10- C13, n-alkanes, n-alkanes, isoalkanes,

cyclics, < 2 % aromatics

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:

P101 If medical advice is needed, have product container or label at hand.

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 IF SWALLOWED: Immediately call a POISON CENTER or

+ P331 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.

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





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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: 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 Registr. Nr.: 01-2119457273-39	918-481-9	-	Flam. Liq. 3 Asp. Tox. 1 (Note J)	H226 H304 EUH066	90 – 97
Fatty alcohol polyglycolether, ethoxylated REACH Registr. Nr.: 01-2119489407-26	500-236-9	68920-66-1	Skin Irrit. 2 Aquatic Acute 1 Aquatic Chronic 3	H315 H400 (M=1) H412	< 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.

Inhalation: Remove the affected person to fresh air. Get medical help on site. Give

supplemental oxygen, if breathing is difficulty. 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.





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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.

5.2 Special hazards arising from the <u>mixture</u> 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.



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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.

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



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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: -

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 (EN 166).

Skin protection: Protective clothing.

Other special: No data.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.





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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):

Decomposition Temperature

Oxidizing properties:

Napour pressure at 20°C:

Vapour density (air=1):

Density at 15°C:

O.6 vol% / 6.5 vol%

not data available

not data available

0.789-0.810 g/cm³

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 No dangerous decomposition products are formed under normal

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





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SECTION 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No data for the product.

Oral: No data.
Dermal: No data.
Inhalation: No data.

Components:

Hydrocarbons, C10-C13, n-alkanes, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

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)

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

Other information, specific effects:

Note J: The classification as a carcinogen or mutagen need not apply if it can be shown that

the substance contains less than 0,1 % w/w benzene (EINECS 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: May be fatal if swallowed and enters airways.

SECTION 12 Ecological information

12.1 Toxicity No data for the product.

Components:

Hydrocarbons, C10-C13, n-alkanes, n-alkanes, isoalkanes, cyclics, < 2 % aromatics

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



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12.2 Persistence and degradability

Biodegradability:

Fatty alcohol polyglycolether,

ethoxylated 73 % (OECD 301 B)

12.3 Bioaccumulative potential No data for the product.

Hydrocarbons, C10- C13, n-alkanes, n-alkanes, isoalkanes, cyclics, < 2 %

aromatics Log Pow 2,1 – 6 ((Literature)

Log Kow 5,5 – 6 (calculated)

12.4 Mobility
Mobility in water: Evaporates easily from the water.

Mobility in soil: 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: Large spills may be hazardous to the environment.

Water hazard class (German): 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



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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:

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

1272/2008/EC regulation, Annex XVII. of REACH

Relevant Hungarian and EU regulations

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. H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Flam. Liq. 3 Flammable liquid Category 3 Asp. Tox. 1 Aspiration hazard Category 1

Skin Irrit. 2 Skin corrosion/irritation Category 2

Aquatic Acute 1 Hazardous to the aquatic environment, Acute Category 1 Aquatic Chronic 3 Hazardous to the aquatic environment, Chronic Category 3





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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 Labelling CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging

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
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

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



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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	11.02.2010	2
9	Physical and chemical properties		
1	Product name	27.04.2010	3
2	Hazards identification.	11.09.2012	4
3	Composition/information on ingredients.		
9	Physical and chemical properties		
12	Ecological information		
1-16	Regulatory information, other corrections.		
	Revision modification according to 1272/2008/EC and		
	453/2010/EC		
1	Details of the supplier of the safety data sheet, Responsible	05.01.2016	5
	for SDS		
1-16	Other corrections, revision modification according to		
	2015/830 /EC		
2.2	Label elements	22.03.2019	6
3	Composition/information on ingredients.		