

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

Trade name: **EVOX Premium concentrate coolant concentrate**

Version: 1 Latest revision:

Date of issue: 22. 05. 2013

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

1.1 Product identifier:

EVOX Premium concentrate coolant concentrate

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: coolant concentrate

Uses advised against: no data

1.3 Details of the supplier of the safety data sheet:

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 SD and HSE

Phone: +36 34 526 343; Mobile: +36 20 474 2644

e-mail: csahorvath@mol.hu

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

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 1 476 6464, or +36 80 201 199

National Health Toxicological Information Service:

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2. Hazards identification

2.1 Classification of the mixture

2.1.1 Classification of the mixture according to regulation (EC) No 1272/2008

Hazard Class and Category:	Hazard statement:
Acute Tox. 4	H302 Harmful if swallowed.
STOT RE 2	H373 May cause damage to kidneys through prolonged or repeated exposure if swallowed.
Repr. 2	H361d Suspected of damaging the unborn child.

2.1.2 Classification of the mixture according to regulation (EC) No 1999/45

Human health hazards:	Xn (harmful)
R 22	Harmful if swallowed.
R 63	Possible risk of harm to the unborn child.
Note:	If swallowed may cause mental confusion, central nervous system effects and kidney damage. May cause mild eye irritation: transient burning of the eyes, redness, dim-red sight, inflammation of the iris and tissues. In aerosol form may cause blindness. May cause mild skin irritation: transient burning of the skin, redness and swelling. Risk of skin resorption. Inhalation of vapours, sprays or mists generated at elevated temperature may produce slight, burning effects in respiratory track. Vapours may cause narcosis.

Safety hazards: Danger symbol not required.

Environmental hazards: Danger symbol not required.

Note: Do not empty into waterways without disposal.

2.2 Label elements (EC) No 1272/2008

Product identification:

Trade name:

EVOX Premium concentrate coolant concentrate

Hazardous substance(s):

Ethanediol(CAS: 107-21-1)

2-ethyl-hexanoic acid, sodium salt (CAS: 19766-89-3)

GHS Pictogram:



Signal word:

Warning

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Hazard statement:

H302 Harmful if swallowed

H373 May cause damage to kidneys through prolonged or repeated exposure if swallowed.

H361d Suspected of damaging the unborn child.

Precautionary statements – General:

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

P102 Keep out of the reach of children.

Precautionary statements - Prevention

P260 Do not breathe mist/vapours/spray.

P270 Do not eat, drink or smoke when using this product.

Precautionary statements - Response

P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Precautionary statements - Disposal

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

Other liabilities for labelling:

Tactile warning of danger: Not distributed for population.

Transport classification: see section 14.


2.3 Other hazards: No data available

3. Composition/information on ingredients

3.1 Mixtures

Chemical description: Ethylene glycol with additives, colorific.

Ingredients:

Name	EU number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. % (m/m)
Ethanediol  REACH Registration No.: 01-2119456816-28	203-473-3	107-21-1	67/548/EEC: Xn 1272/2008/EC: Acute Tox. 4 STOT RE 2	R 22 H302 H373	max. 100

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Name	EU number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. % (m/m)
2-ethyl-hexanoic acid, sodium salt 	243-283-8	19766-89-3	67/548/EEC: Xn 1272/2008/EC: Repr. 2	R 63 (Repr. kat. 3) H361d	max. 7.5

The full text of each relevant Hazard classes and cat., R- and H- phrase see in Section 16.

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 exposed person to fresh air if adverse effects are observed. If breathing has stopped, apply artificial respiration. If breathing is labored, administer oxygen. Get medical attention.

Skin contact: Wash immediately with soap and water. If symptoms persist (redness, swelling, pain, blister) get medical attention.

Eye contact: Flush immediately with plenty of running water for at least 15 minutes, holding the eyelids open. Rest the eyes at least 30 minutes. If symptoms persist (redness, burning pain, dim-red sight, swelling) get medical attention.

Ingestion: Wash out the mouth immediately with water. Give plenty of water. Do not induce vomiting! If vomiting occur spontaneously, lower head below waist to prevent fluid entering the lungs. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No data.

4.3 Indication of any immediate medical attention and special treatment need

If swallowed, immediate medical attention is required: 2 hours, gastrolavage, etc.

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5. Fire-fighting measures

Fire hazards:

See also Section 9 - flash point.

5.1 Extinguishing media

Suitable extinguishing media:

Powder, alcohol resistant foam, water, CO₂.

Unsuitable extinguishing media:

No data.

5.2 Special hazards arising from the mixture

Hazardous combustion products:

On burning hazardous gases and vapours (carbon-dioxide, carbon-monoxide, other organic compounds) 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:

Cool containers and surroundings exposed to fire with water spray.

Vapours of ethanediol ethylene glycol heavier than air and form explosive mixture with air.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

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: Exclude source of ignition. Adequate ventilation required in enclosed areas.
Contain spilled liquid with sand, earth or other suitable absorbents.
Recover free liquid by pumping. Dispose of according to local regulations.
Clean up with large amount of water the contaminated area.

On water: Notify local authorities according to regulations.

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6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with chemicals and flammable liquids.

Adequate ventilation required.

Keep material away from and open flame. No smoking.

Avoid contact with skin and eyes, inhalation of vapours.

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

Handling temperature: no data

7.2 Conditions for safe storage, including any incompatibilities

Storage facilities must comply with regulations for storing of chemicals and flammable liquids.

Keep material away from heat, sparks, and open flame. Store in cool, dry, well-ventilated area, in original, tightly closed containers.

Keep out of the reach of children. Keep away from food, drink.

Unsuitable storage materials are: not recommended using plated or galvanized iron or steel containers.

Storage temperature: -13 – +35°C

7.3 Specific end use(s)

Coolant concentrate.

8. Exposure controls / personal protection

Engineering control measures:

Not required.

8.1 Control parameters:

EU (2000/39/EC)

Ethanediol:

Eight hours: 52 mg/m³

Short-term: 104 mg/m³

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8.2 Exposure controls

Personal protection:

Respiratory protection: Under normal use conditions, respirator is not usually required.

Use approved breathing apparatus if vapours, mists and aerosols are generated or recommended exposure limits are exceeded.

Hand protection: Protective gloves (chemical resistant) (EN 374).

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

Eye protection: Chemical goggles.

Skin protection: Protective clothing, possibly chemical resistant protective boots.

Other special: No data.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid

Colour: pink, clear

Odour: mild

Change in physical state:

Crystallisation temperature (1:1)(ASTM D 1177): typ. -37°C

Boiling point: no data

Others:

Flash point (PM) (ASTM D 93): typ. 115°C

Ignition point: no data

Flammability: no data

Explosion limits: lower/upper: no data

Decomposition temperature: unknown

Oxidizing properties: no data

Vapour pressure at 20°C : no data

Density at 20°C (ASTM D 1122): $1.110 - 1.145 \text{ g/cm}^3$

Solubility in water at 20°C : soluble in all proportion

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Thermal decomposition:	no data
n-Octanol/water partition coefficient:	no data
Kinematic viscosity at 20°C:	no data
pH (ASTM D 1187):	typ. 8.9

9.2 Other information

no data available

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.
Nota:	Vapours of ethanediol heavier than air and form explosive mixture with air.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No data for the product.

Oral:

Note: Harmful if swallowed.

Ethanediol:

Oral:	LD (human):	1200-1500	mg/kg
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Oral (OECD 401):	LD ₅₀ (rat):	5840	mg/kg
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	LD ₅₀ (guinea pig):	6610	mg/kg
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	LD ₅₀ (mouse):	2780	mg/kg
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Dermal (OECD 402):	LD ₅₀ (rabbit):	9530	mg/kg
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Note: The main component is ethanediol symptoms of glycol poisoning: breathing disorders, paralysis of central nervous system and in case of severe toxicosis may be fatal.

May cause vomiting when ingested. Aspiration into the lungs may cause chemical pneumonitis. May produce central nervous system disorders.

Absorb on skin.

Vapours may cause narcosis.

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Acute toxicity: irritation

Inhalation: not irritant (based on components)

Note: Elevated temperatures, mixing or mechanical action may form mists, which may cause slightly burning effects in nose, throat and lungs.

Skin contact: not irritant (based on components)

Note: Prolonged and/or repeated contact may cause slight irritation: transient burning effects, mild local redness on skin and/or swelling. Risk of skin resorption.

In case of short term contact is not expected to other unlikely effects.

Eye contact: not irritant (based on components)

Note: May cause slight irritation: transient burning effects, mild redness and/or dim sight.

Prolonged and/or repeated contact may cause slight irritation: transient burning effects, mild local redness on skin and/or swelling. Risk of skin resorption.

In case of short term contact is not expected to other unlikely effects.

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

Chronic toxicity: If swallowed may cause mental confusion, central nervous system effects and kidney damage.

Repeated dose toxicity: not known

Other information, specific effects:

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

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

Reproduction-damaging effect: Suspected of damaging the unborn child.

Aspiration hazard: May cause vomiting when ingested. Aspiration into the lungs may cause chemical pneumonitis.

12. Ecological information

12.1 Toxicity No data available for the preparation.

Ethanediol:

Aquatic organisms: Fish toxicity: LC₅₀ >100 mg/l (Literature)

Daphnia toxicity: EC₅₀ >100 mg/l (Literature)

Algae toxicity: IC₅₀ >100 mg/l (Literature)

Soil organisms: Bacteria toxicity: >1000 mg/l (Literature)

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12.2 Persistence and degradability

Biodegradability: Readily degradable. (Literature)

12.3 Bioaccumulative potential

Has low bioaccumulation (ethylene glycol)

12.4 Mobility

Mobility in soil: Large spills to soil can contaminate groundwater.

Mobility in water: No data available.

12.5 Results of PBT and vPvB assessment

Not required.

12.6 Other adverse effects

Biological oxygen demand: *Ethanediol:* BOD: 0,81 g/g (Literature)

Chemical oxygen demand: *Ethanediol:* COD: 1,29 g/g (Literature)

Heavy metal content: None.

PCT, PCB and other chlorinated hydrocarbons: None.

Effects on activated sludge: The product can be disposed in wastewater treatment plant – biological stage of treatment (activation) after dilution in the ratio 1:1000 and after approval of relevant authority and manager of the sewer.

Environmental effects: Do not empty into waterways without disposal.

Water hazard class (German): WGK 1

13. Disposal considerations

13.1 Waste treatment methods

Product disposal:

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

EWC cod: 16 01 14*

Antifreeze fluids 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.

EWC cod: 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.

14. Transport information

Land transport:

Road/ Railway

ADR/RID:

Not classified.

Waterways:

Inland waterways/ Sea transport ADN/IMDG:

Not classified.

Air transport: ICAO / IATA:

Not classified.

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.: 453/2010/EC) and to Regulation (EC) 1272/2008.

15.2 Chemical safety assessment.

not available

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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

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

R 22 Harmful if swallowed.

R 63 Possible risk of harm to the unborn child.

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure through prolonged or repeated exposure.

Acute Tox. 4 Acute toxicity Category 4

Repr. 2 Reproductive toxicity Category 2

STOT RE 2 Specific target organ toxicity – repeated exposure Category 2

Revision Indicators:

Section	Subject of change	Date	Version