

SAFETY DATA SHEET



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

MOL-LUB Ltd.

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

Version: 3 Latest revision: 27. 08.2018 Date of issue: 22. 05. 2013 Page: 1/(14)

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

- 1.1 Product identifier:
EVOX Premium concentrate coolant concentrate
- 1.2 Relevant identified uses of the mixture or substance and uses advised against
Relevant identified uses: antifreeze coolant concentrate
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: |
|----------------------------|---|
| 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. |

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2.2 Label elements

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

Hazardous components: Ethanediol CAS: 107-21-1)
Sodium 2-ethylhexanoate (CAS: 19766-89-3)

GHS Pictogram:



Signal word: **Warning**

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.

Supplemental hazard information: -

Precautionary statements – General:

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

Precautionary statements - Prevention

P260 Do not breathe mist/vapours/spray
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves.

Precautionary statements - Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

Precautionary statements – Storage:

P405 Store locked up.

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: distributed for population.

Transport classification: see section 14.

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: Ethylene glycol with additives, colorific.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Ethanediol REACH Registr.Nr.: 01-2119456816-28-0024	203-473-3	107-21-1	Acute Tox. 4 STOT RE 2	H302 H373	<100
Sodium 2-ethylhexanoate	243-283-8	19766-89-3	Repr. 2	H361d	max. 7.5

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 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. Remove contaminated clothing. If symptoms persist (redness, swelling, pain, bladder) get medical attention.

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Eye contact: Flush immediately with plenty of running water for at least 10-15 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.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed.

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

Suspected of damaging the unborn child.

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.

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

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.

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

May cause blindness in the form of an aerosol.

Symptoms of glycol poisoning: breathing disorders, paralysis of central nervous system and in case of severe toxicosis may be fatal.

4.3 Indication of any immediate medical attention and special treatment need

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

SECTION 5 Fire-fighting measures

Fire hazards:

Combustible

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5.1 Extinguishing media

Suitable extinguishing media:

According to the existing fire-fighting regulations, powder, alcohol resistant foam, water, CO₂.

Unsuitable extinguishing media:

No data.

5.2 Special hazards arising from the mixture or substance

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 heavier than air and form explosive mixture with air.

SECTION 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.

SECTION 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 and wash it before reuse. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

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)

Antifreeze coolant concentrate.

SECTION 8 Exposure controls / personal protection

Engineering control measures:

Not required.

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8.1 Control parameters:

EU (2000/39/EC)

<i>Ethandiol:</i>	Eight hours:	52 mg/m ³
	Short-term:	104 mg/m ³

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: Where splashing is possible, wear safety glasses (EN 166).

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

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 (ASTM D 1500):	pink, clear
Odour:	mild

Change in physical state:

Crystallisation temperature (ASTM D 1177): (Diluted 1:1 with distilled water)	typ. -37°C
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Boiling point:	no data
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Others:

Flash point (COC) (EN ISO 2592):	typ. 128°C
Ignition point:	no data

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Flammability:	no data
Explosion limits: lower/upper:	no data
Decomposition temperature:	no data
Oxidizing properties:	no data
Vapour pressure at 20°C:	no data
Density at 20°C (ASTM D 1122):	1.110 – 1.145 g/cm ³
Solubility in water at 20°C:	soluble in all proportion
Thermal decomposition:	no data
n-Octanol/water partition coefficient:	no data
Kinematic viscosity at 20°C (EN ISO 3104):	no data
pH (ASTM D 1287):	typ. 8.9

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

SECTION 11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity: Harmful if swallowed.
No data for the product.

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Component:

Ethanediol:

Oral:	LD (human):	1200-1500	mg/kg
Oral (OECD 401):	LD ₅₀ (rat):	5840	mg/kg
	LD ₅₀ (guinea pig):	6610	mg/kg
	LD ₅₀ (mouse):	2780	mg/kg
Dermal (OECD 402):	LD ₅₀ (rabbit):	9530	mg/kg

Acute toxicity: irritation

Skin contact: not irritant (based on components)

Eye contact: not irritant (based on components)

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

Other information, specific effects:

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

Aspiration hazard: not classified

SECTION 12 Ecological information

12.1 Toxicity No data available for the preparation.

Component:

Ethanediol:

Aquatic organisms:	Fish toxicity:	LC ₅₀	>100 mg/l	(Literature)
	Daphnia toxicity:	EC ₅₀	>100 mg/l	(Literature)
	Algae toxicity:	IC ₅₀	>100 mg/l	(Literature)
Soil organisms:	Bacteria toxicity:		>1000 mg/l	(Literature)
Plants:	No data.			

12.2 Persistence and degradability

Biodegradability: Readily degradable (Literature)

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12.3	Bioaccumulative potential	Has low bioaccumulation (ethylene glycol).		
12.4	Mobility	Large spills to soil can contaminate groundwater.		
	Mobility in soil:	Fully soluble in water.		
	Mobility in water:			
12.5	Results of PBT and vPvB assessment	Does not contain PBT and vPvB substances.		
12.6	Other adverse effects			
	Biological oxygen demand:	<i>Ethanediol:</i>	BOD:	0,81 g/g (Literature)
	Chemical oxygen demand:	<i>Ethanediol:</i>	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 (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: 16 01 14*

Antifreeze fluids 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.

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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:	Not classified.
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- | | | |
|-------|-------------------------------|---|
| 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: | - |

Waterways:

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

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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)

Acute Tox. 4 H302 calculation method

STOT RE 2 H373 calculation method

Repr. 2 H361d calculation method

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

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

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

Acute Tox. 4 Acute toxicity Category 4

Repr. 2 Reproductive toxicity Category 2

STOT RE 2 Specific target organ toxicity – repeated exposure 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
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International carriage of Dangerous Goods by Rail

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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 12 1-16	Composition/information on ingredients Ecological information Other corrections, revision modification according to 2015/830 /EC	24.08.2015	2
2 3 2.2., 14 1-16	Hazards identification Composition/information on ingredients Regulatory information Other corrections	27.08.2018	3