SAFETY DATA SHEET

Lube-En®

SECTION 1: Identification of the substance or mixture and of the company or undertaking

1.1. Product identifier Trade name

Lube-En®

1.2. Relevant identified uses of the substance or mixture and uses which are not recommended Relevant identified uses of the substance or mixture

Lubricant
For professional use only.

Uses that are not recommended

Not known.

1.3. Information on the supplier of the safety data sheet Company name and address

EnviOn Oy
Katajaharjunkaari 4
45720 Kouvola Finland
358 (0)10 3200 200
www.envion.fi
Contact person
Tarmo Paloniemi
E-mail address
myynti@envion.fi

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20.12.2024

KTT version

1.0

1.4. Emergency hotline

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazard identification

2.1. Classification of a substance or mixture

Not classified according to Regulation (EC) No 1272/2008 (CLP).

2.2. Markings

Warning signs

Not applicable.

Note:

Not applicable.

Risk phrases

Not applicable.

Safeguard clauses

General

-

Prevention

-

Rescue measures

-

Storage

-

Waste management

-

Hazardous substances

Not known.

Supplementary information

EUH210, Safety Data Sheet supplied on request.

2.3. Other hazards

Miscellaneous

This mixture/product does not contain substances that would meet the criteria to be classified as PBT and/or vPvB. The product does not contain substances identified as endocrine disrupters according to the criteria laid down in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition and information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Alloys

Product/ingredient	Tags	Concentration	Classification	Remarks
1,2-Ethanediol; ethylene glycol	CAS: 107-21-1 EC: 203-473-3 REACH ref. no.: 01-2119456816-28-XXXX Index No: 603-027-00-1	10-20%	Acute Tox. 4, H302	[1]
2-Aminoethanol; ethanolamine	CAS: 141-43-5 EC: 205-483-3 REACH ref. no.: 01-2119486455-28-XXXX Index No: 603-030-00-8	<1%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412	[1]

The H phrases are given in full in section 16. Occupational hygiene limit values are given in section 8, where available.

Other information

[1] European occupational exposure limit value.

SECTION 4: First aid measures

4.1. Description of first aid measures

General

In case of an accident: contact a doctor or first aid - take the label or this safety data sheet with you.
If symptoms persist or if you are unsure the injured person's condition, seek medical attention. Never give an unconscious person water or anything to drink.

Inhaled

In case of breathing difficulties or respiratory irritation: move the person to fresh air and monitor their

condition.

Contact with the skin
If irritation occurs: rinse with water. If irritation persists: seek medical attention.

Contact with the eyes
IF CHEMICAL GETS IN EYES: Rinse immediately with water (20 - 30 ˚C) for at least 5 minutes. Seek medical attention. Remove any contact lenses. Continue rinsing during transport.

Swallowed
If the person is conscious, rinse the mouth with water and control the person. Do not give the person anything to drink. In case of nausea. Do not vomit unless advised to do so by a doctor. Keep your head down so that any vomit does not flow back into your mouth or throat.

Burn injury
Not applicable.

4.2. Main symptoms and effects, both immediate and delayed
Unknown.

4.3. Advice on immediate medical attention and special care that may be required
Treat according to symptoms.

Information for doctors
Take this safety data sheet or the product label with you.

SECTION 5: Fire-fighting measures

5.1. Fire extinguishers
Suitable extinguishing media: alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: water spray must not be used as it may spread the fire.

5.2. Special hazards arising from the substance or mixture
The fire produces thick smoke. Exposure to decomposition products may pose a health hazard. Cool closed containers exposed to the fire with water. Fire-fighting water must not be allowed to run off into the sewerage system or watercourse.
If the product is exposed to high temperatures, e.g. in a fire, it may form dangerous degradation products. These include:
Carbon oxides (CO/CO2)

5.3. Fire prevention instructions
No specific requirements.

SECTION 6: Accidental release measures

6.1. Precautions, personal protection and emergency procedures
Ensure proper ventilation, especially in confined spaces.
Contaminated areas may be slippery

6.2. Precautions for the environment
Avoid discharges into lakes, rivers, sewage systems, etc. Keep outsiders away from the spill

6.3. Methods and equipment for containment and cleaning
Use sand, kieselguhr or general absorbents to collect non-combustible materials and store the material in a container for disposal, in accordance with local regulations.
If possible, use ordinary cleaning products for cleaning. Avoid the use of solvents.

6.4. References to other points
For information on waste management, see section 13 "Waste management considerations". See protective measures in section 8 "Exposure prevention and personal protective equipment".

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact during pregnancy and breast-feeding.
Smoking, eating and drinking are not allowed in the workplace.
See information on personal protective equipment in section 8 "Exposure prevention and personal protective equipment".

7.2. Conditions for safe storage, including incompatibilities
Opened containers must be carefully resealed and kept upright to prevent leakage.

Suitable packaging
Store in the original packaging.
Storage conditions
Dry, cool and well ventilated
Incompatible materials
Bases
Strong acids

7.3. Specific end use
This product should only be used as described in section 1.2.

SECTION 8: Exposure prevention and personal protective equipment

8.1. Controlled parameters 1,2-ethanediol; ethylene glycol
HTP values (8 h) (ppm): 20
HTP values 8 h) (mg/m³): 50
HTP values (15 min) (ppm): 40
HTP values 15 min) (mg/m³): 100 Note:
Skin= Absorption through the skin is possible.

Glyserol
HTP values 8 h) (mg/m³): 20

2-Aminoethanol;
ethanolamine HTP values (8 h) (ppm): 1
HTP values 8 h) (mg/m³): 2.5
HTP values (15 min) (ppm): 3
HTP values 15 min) (mg/m³): 7.6 Note:
Skin= Absorption through the skin is possible.

Decree of the Ministry of Social Affairs and Health on concentrations known to be harmful (654/2020).

DNEL

1,2-Ethanediol; ethylene glycol

Duration:	Exposure route:	DNEL:
Long-term - local impacts - workers	Inhaled	35 mg/m³
Long-term - local impacts - population	Inhaled	7 mg/m³
Long-term - Systematic effects - workers	Through the skin	106 mg/kg/day
Long-term - Systematic effects - population	Through the skin	53 mg/kg/day

2-Aminoethanol; ethanolamine

Duration:	Exposure route:	DNEL:
Long-term - local impacts - workers	Inhaled	510 µg/m³
Long-term - local impacts - population	Inhaled	280 µg/m³
Long-term - Systematic effects - workers	Inhaled	1 mg/m³
Long-term - Systematic effects - population	Inhaled	180 µg/m³
Long-term - Systematic effects - workers	Through the skin	3 mg/kg/day
Long-term - Systematic effects - population	Through the skin	1.5 mg/kg/day
Long-term - Systematic effects - population	By mouth	1.5 mg/kg/day

Glyserol

Duration:	Exposure route:	DNEL:

Long-term - local impacts - workers	Inhaled	220 mg/m³
Long-term - local impacts - population	Inhaled	132 mg/m³

P EC

1,2-Ethanediol; ethylene glycol

Exposure route:	Duration of exposure:	PNEC:
Periodic emission (freshwater)		10 mg/L
Periodic emission (seawater)		10 mg/L
Waste water treatment plant		199.5 mg/L
Country		1.53 mg/kg
Freshwater sediment		37 mg/kg
Freshwater		10 mg/L
Sea water sediment		3.7 mg/kg
Sea water		1 mg/L

2-Aminoethanol; ethanolamine

Exposure route:	Duration of exposure:	PNEC:
Periodic emission (freshwater)		28 µg/L
Waste water treatment plant		100 mg/L
Country		1.29 mg/kg
Freshwater sediment		357 µg/kg
Freshwater		70 µg/L
Sea water sediment		35.7 µg/kg
Sea water		7 µg/L

Glyserol

Exposure route:	Duration of exposure:	PNEC:
Waste water treatment plant		1 g/L

8.2. Exposure prevention

Compliance with the limit values must be monitored regularly.

General recommendations

Smoking, eating and drinking are not allowed in the workplace.

Exposure scenarios

No exposure scenarios have been provided for this product.

Occupational exposure limit values

Professional users are subject to the provisions of the workplace legislation on maximum exposure levels. See occupational hygiene limit values above.

Appropriate technical control measures

Vapour generation should be minimised and the vapour concentration should be kept below the current limit values (see above). If necessary, use target exhaust if ventilation in the workplace is not adequate. Ensure that eye rinses and emergency showers are visibly marked.
Take normal precautions when using the product. Avoid inhalation of vapours.

Hygiene measures

Exposed areas of the body should be washed whenever there is a break in the use of the product or when work stops. Pay particular attention to hands, arms and face

Precautions to limit environmental exposure

No specific requirements.

Personal protective measures, such as personal protective equipment

General

Use only CE-marked protective equipment.

Respiratory protection

Type	Category	Colour	Standards
Respiratory protection is not required if ventilation is adequate.			

Skin protection

Recommendation	Type/Category	Standards	
Wear work clothing.	-	-	

Hand protection

Material from	Thickness (mm)	Transit time (min.)	Standards	
Protective gloves	-	-	EN374	

Eye and face protection

Type	Standards	
Wear goggles, with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Form
Liquid
Colour
Brown
Odour / Odour threshold (ppm) Mild
pH
Testing irrelevant or not possible due to the nature of the product.
Density (g/cm³)
1,1
Kinematic viscosity
Testing irrelevant or not possible due to the nature of the product.
Properties of particles Not applicable to liquids.
Space change and vapours
Melting and freezing point (˚C)
-35
Softening point or range (˚C)
Not applicable to liquids.
Boiling point (˚C)
>100
Vapour pressure
Testing irrelevant or not possible due to the nature of the product.
Relative density of vapour
Testing irrelevant or not possible due to the nature of the product.
Decomposition temperature (˚C)
Testing irrelevant or not possible due to the nature of the product.
Fire and explosion hazard
Flash point (˚C)
>100

Flammability (°C)
Testing irrelevant or not possible due to the nature of the product.
Self-ignition temperature (°C)
>150
Explosion limits (% v/v)
Testing irrelevant or not possible due to the nature of the product.
Solubility Solubility
in water
Testing irrelevant or not possible due to the nature of the product.
Partition coefficient: n-octanol/water (LogKow)
Testing irrelevant or not possible due to the nature of the product.
Fat solubility (g/L)
Testing irrelevant or not possible due to the nature of the product.
9.2. Other information
Other physical and chemical parameters
Data not available.
Oxidising properties
Testing irrelevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity No data available.
10.2. Chemical stability
The product is stable under the conditions described in section 7 "Handling and storage".
10.3. Possibility of dangerous reactions Not known.
10.4. Conditions to avoid
Protect from heat, hot surfaces, sparks, open flames and other sources of ignition. Extreme temperatures
10.5. Incompatible materials Strong oxidising agents
10.6. Hazardous decomposition products
Under normal storage and use, no degradation products should be formed

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Immediate toxicity

Product/ingredient	Glycerol
Species:	Rat
Exposure route:	Oral route
The test:	LD50
The result:	>11500 mg/kg

Product/ingredient	Glycerol
Species:	Rat
Exposure route:	Inhalation
The test:	LC50 (4 h)
The result:	>275 mg/cm²

Skin corrosivity/irritation
Based on the available data, the classification criteria are not met.
Severe eye damage/eye irritation
Based on the available data, the classification criteria are not met.
Respiratory sensitisation
Based on the available data, the classification criteria are not met.
Skin sensitisation

Based on the available data, the classification criteria are not met.

Genome-damaging effects on germ cells

Based on the available data, the classification criteria are not met.

Carcinogenic effects

Based on the available data, the classification criteria are not met.

Reproductive toxicity

Based on the available data, the classification criteria are not met.

Life Cycle Toxicity - Single Exposure

Based on the available data, the classification criteria are not met.

Acute toxicity - repeated exposure

Based on the available data, the classification criteria are not met.

Aspiration risk

Based on the available data, the classification criteria are not met.

11.2. Information on other hazards Long-term effects

Not known.

Endocrine disrupting properties

This mixture/product does not contain substances considered to have endocrine disrupting properties for health.

Other information Not known.

SECTION 12: Information on hazards to the environment

12.1. Toxicity

Product/ingredient	Glycerol
Species:	Fish, Pimephales promelas
Duration:	96 h
The test:	LC50
The result:	>885 mg/L

Product/ingredient	Glycerol
Species:	Water vole, Daphnia magna
Duration:	48 h
The test:	LC50
The result:	1955 mg/L

Product/ingredient	Glycerol
Species:	Algae, Microcystis aeruginosa
Duration:	192 hours
The test:	EC50
The result:	2900 mg/L

12.2. Stability and degradability

Product/ingredient	Glycerol
Conclusion:	-
The test:	OECD 301 C

12.3. Bioaccumulation

Product/ingredient	Glycerol
LogKow:	-1.76 (imputed)
Conclusion:	-

12.4. Mobility in soil No information available.

12.5. Results of the PBT and vPvB assessment

This mixture/product does not contain substances that would meet the criteria to be classified as PBT and/or vPvB.

12.6. Endocrine disrupting properties

This mixture/product does not contain substances considered to have endocrine disrupting properties in the environment.

12.7. Other adverse effects Not

known.

SECTION 13: Waste management aspects

13.1. Waste treatment methods

The product is not covered by legislation on hazardous waste.
Commission Regulation (EU) No 1357/2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives.

European Waste Code Not applicable.

Contaminated packaging

Packaging containing residues of the product is disposed of in accordance with the same regulations as the product.

SECTION 14: Transport information

	14.1 UN No	14.2 Official name for transport	14.3 Transport hazard classes	14.4 PG*	14.5 Env**	Other data:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Miscellaneous

Not a dangerous product according to ADR, IATA and IMDG rules.

14.6. Special precautions for the user Not applicable.

14.7 Sea transport in bulk in accordance with IMO instruments

Information not available.

SECTION 15: Legislative information

15.1. Safety, health and environmental regulations or legislation specific to the substance or mixture

Restrictions on use

For professional use only.
Pregnant and breastfeeding women should not be exposed to this product. The risk of exposure and the technical protection measures to prevent exposure must be taken into account.

Specific training requirements No specific requirements.

SEVESO - Categories of dangerous substances / Designated dangerous substances Not applicable.

Change

Not applicable.

Sources

Government Decree on the protection of pregnant workers and workers who have recently given birth or are breastfeeding from hazardous agents at work (143/2024)
Commission Regulation (EU) No 1357/2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information.

H-phrases listed under point 3 in full text H302, Harmful if swallowed.
H312, Harmful in contact with skin.
H314, Very corrosive skin and eyes. H318, Seriously damaging to eyes.
H332, Harmful by inhalation.
H335, May cause respiratory tract irritation.
H412, Harmful to aquatic organisms, long term adverse effects.

Abbreviations
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
AS= Exposure scenario
ATE= Acute toxicity estimate BCF = Biological bioaccumulation factor
CAS= Chemical Identification Number System
CLP= Regulation on classification, labelling and packaging of chemicals [Regulation (EU) No. 1272/2008] CSA = Chemical Safety Assessment
KTR= Chemical Safety Report
DNEL= Derived no-effect exposure level
EINECS= European Inventory of Existing Commercial Substances
EUH phrases = CLP additional hazard statements
EuPCS= European Product Classification System
EWC = European Waste Catalogue
GHS = Globally Harmonised System of Classification and Labelling of Chemicals GWP = Global Warming Potential
HTP= Concentration known to be harmful IATA = International Air Transport Association
IBC= Intermediate Bulk Container, IBC container
IMDG = International Maritime Dangerous Goods Convention
MARPOL = International Convention for the Prevention of Marine Pollution 73/78, ("Marpol" = marine pollution)
OECD= Organisation for Economic Co-operation and Development
PBT = persistent, bioaccumulative and toxic
PNEC = predicted no effect concentration
RID = International Rail Regulations RRN = REACH registration number
SCL= Specific concentration limit
SVHC= Substance of very high concern
STOT-SE= Occupational toxicity - repeated exposure STOT-RE= Occupational toxicity - single exposure UN = United Nations
UVCB= Substance of unknown or variable composition, complex reaction product or biological material VOC = Volatile Organic Compounds
vPvB= Very persistent and highly bioaccumulative " More information
Not applicable.

The safety data sheet has been validated The safety data sheet has not been validated.

Change
Changes to the previous major version (the first number of the version number, see section 1 of the KTT) are indicated by a blue triangle.
The information in this safety data sheet applies only to the product mentioned in section 1 and does not necessarily apply to use with other products.
It is recommended that this safety data sheet be provided to the actual user of the product. The information provided must not be used as a product label.
Country-language: FI-fi