SAFETY DATA SHEET
EXTENDED LIFE COOLANT

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name EXTENDED LIFE COOLANT

Product number 13500

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Antifreeze liquid.

Uses advised against This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. This product is designed only to suit automotive applications and no provision is made for the requirements of aviation applications.

1.3. Details of the supplier of the safety data sheet

Supplier PETROL OFİSİ A.Ş.
Ünalan Mahallesi, Libadiye Caddesi No: 82F Kat: 2-3-4, 34700 Üsküdar/ Istanbul
Tel: +90 850 339 1919
Fax: +90 216 275 3854
madeniyag@petrolofisi.com.tr

Contact person Customer Services: madeniyag@petrolofisi.com.tr

1.4. Emergency telephone number

Emergency telephone Madeni Yağ Customer Services: 0850 339 1919 (working hours)

National emergency telephone number National Poison Consultance Center: 114 Emergency Medical Services: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Repr. 2 - H361d STOT RE 2 - H373

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms

Signal word Warning

EXTENDED LIFE COOLANT

Hazard statements

H302 Harmful if swallowed.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P314 Get medical advice/ attention if you feel unwell.
P330 Rinse mouth.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

Monoetilen Glikol, Ethylene glycol, Sodium 2-ethylhexanoate

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Monoetilen Glikol **60-80%**

CAS number: 107-21-1

Classification
Acute Tox. 4 - H302

Ethylene glycol **10-20%**

CAS number: 107-21-1

Classification
Acute Tox. 4 - H302
STOT RE 2 - H373

Sodium 2-ethylhexanoate **1-5%**

CAS number: 19766-89-3 EC number: 243-283-8

Classification
Repr. 2 - H361d

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.

Inhalation

Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

EXTENDED LIFE COOLANT

Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Give plenty of water to drink. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

General information	Treat symptomatically. See Section 11 for additional information on health hazards.
Inhalation	No specific symptoms known.
Ingestion	Ingestion of large amounts may cause unconsciousness. Do not induce vomiting due to the risk of obstruction the respiratory tracts.
Skin contact	No specific symptoms known.
Eye contact	Long-term or serious eye irritation is not expected.Thermal burns may occur if this material is heated and eye contact.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	The effect of decomposition products that may be released during the fire may be delayed. The exposed person may need to be kept under medical observation for 48 hours. Treat symptomatically.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Using a water jet can be inconvenient.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Thermal decomposition may produce smoke, oxies of carbon and lower molecular weight organic compounds whos composition have not been characterised. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Solvent vapours may form explosive mixtures with air.
Hazardous combustion products	Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting	In case of insufficient ventilation, wear the required breathing apparatus. No action shall be taken without appropriate training or involving any personal risk. Do not enter storage areas or confined spaces unless adequately ventilated. Fight fire remotely due to the risk of explosion. Fight fire from safe distance or protected location. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.
Special protective equipment for firefighters	Wear full protective clothing and self-contained breathing apparatus.

EXTENDED LIFE COOLANT

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes.

For non-emergency personnel Necessary precautions should be taken to ensure that non-educated personnel do not intervene.

For emergency responders Wear protective clothing as shown in section 8 of this safety data sheet. Proper ventilation should be provided.

6.2. Environmental precautions

Environmental precautions Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. If involved in a fire, shut off flow if it can be done without risk.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. See Section 1 for emergency contact information. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Do not handle broken packages without protective equipment.

Advice on general occupational hygiene In the areas where the product is handled, food should not be eaten, beverages should not be drink and smoke should not be smoked. Good personal hygiene procedures should be implemented. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description The product must be used as specified in the data sheet.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments Ethylene glycol: STEL: 104 g/m3 (Vapour); 40 ppm (Vapour)/ TWA: 52 mg/m3 (Vapour); 10 mg/m3 (Particulate); 20 ppm (Vapour)

EXTENDED LIFE COOLANT

DNEL

Ethylene glycol :
General population - Dermal; Long term systemic effects: 53 mg/kg/day
General population - Inhalation; Short term systemic effects: 7 mg/m³
Workers - Dermal; Long term systemic effects: 106 mg/kg/day
Workers - Inhalation; Short term systemic effects: 35 mg/m³
Sodium 2-ethylhexanoate:
Workers - Inhalation; Long term systemic effects: 14 mg/m³
Workers - Dermal; Long term systemic effects: 2 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 3,5 mg/m³
Consumer - Dermal; Long term systemic effects: 1 mg/kg/day
Consumer - Oral; Long term systemic effects: 1 mg/kg/day

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

When determining engineering controls and when choosing personal protection equipment, consider the possible risks of this substance (see Section 2), appropriate exposure limits, business activities and other substances in the workplace.If engineering controls and work practices are not sufficient to prevent exposure to harmful levels of this substance, the use of personal protective equipment as described in this section is recommended. This product is not to be used under conditions of poor ventilation. Static electricity and formation of sparks must be prevented.

Personal protection

Keep away from foodstuffs, beverages and foods. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers. Koruyucu elbise ve önlüklerin düzenli bakımı yapılmalıdır.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Use good industrial hygiene practices.

Other skin and body protection

Personal protective equipment for the body should be selected based on the task being performed and the risk involved and should be approved by a specialist before handling this product.

Hygiene measures

Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. When using do not eat, drink or smoke. Clean equipment and the work area every day. The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Eye washes and showers for emergency use.

Respiratory protection

Use appropriate respiratory protection if there is the potential to exceed the exposure limits. If ventilation is inadequate, suitable respiratory protection must be worn.

Thermal hazards

If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures.

Environmental exposure controls

Keep container tightly sealed when not in use. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

EXTENDED LIFE COOLANT

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Pink.
Odour	Characteristic.
Odour threshold	No specific test data are available.
pH	pH (diluted solution): 8.4 33
Melting point	No specific test data are available.
Initial boiling point and range	No specific test data are available.
Flash point	No specific test data are available.
Evaporation rate	No specific test data are available.
Evaporation factor	No specific test data are available.
Flammability (solid, gas)	No specific test data are available.
Upper/lower flammability or explosive limits	No specific test data are available.
Other flammability	No specific test data are available.
Vapour pressure	No specific test data are available.
Vapour density	No specific test data are available.
Relative density	1.11 g/ml @ 20°C
Bulk density	No specific test data are available.
Solubility(ies)	No specific test data are available.
Partition coefficient	No specific test data are available.
Auto-ignition temperature	No specific test data are available.
Decomposition Temperature	No specific test data are available.
Viscosity	Inconclusive data.
Explosive properties	No specific test data are available.
Explosive under the influence of a flame	No suitable data is available.
Oxidising properties	No data available.
Comments	Bilgi yok.

9.2. Other information

Other information	No information required.
Refractive index	No specific test data are available.
Particle size	No specific test data are available.
Molecular weight	No specific test data are available.
Volatility	No specific test data are available.

EXTENDED LIFE COOLANT

Saturation concentration	No specific test data are available.
Critical temperature	No specific test data are available.
Volatile organic compound	No specific test data are available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No data available.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reaction under normal conditions of storage and use.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

Materials to avoid	Chlorates. Nitrates. Strong acids. Strong oxidising agents. Peroxides.

10.6. Hazardous decomposition products

Hazardous decomposition products	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Information given is based on product data, a knowledge of the components and the toxicology of similar products.
Other health effects	No relevant information available.

Acute toxicity - oral

Notes (oral LD_{50})	Ethylene glycol: LD_{50} 1600 mg/kg, Oral, Cat
ATE oral (mg/kg)	579.71

Acute toxicity - dermal

Notes (dermal LD_{50})	Ethylene glycol: LD_{50} >3500 mg/kg, Dermal, Mouse

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Ethylene glycol: LC50, Rat , >2,5 mg/l,6 hours

Skin corrosion/irritation

Skin corrosion/irritation	Not classified as a primary skin irritant.
Animal data	No information available.
Human skin model test	No information available.
Extreme pH	No information available.

Serious eye damage/irritation

Serious eye damage/irritation	Based on available data the classification criteria are not met.

Respiratory sensitisation

EXTENDED LIFE COOLANT

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

Summary Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (kidney) through prolonged or repeated exposure.

Aspiration hazard

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

Toxicokinetics No information is required.

General information Information given is based on data of the components and of similar products.

Medical symptoms Dizziness. Severe stomach pain. Nausea, vomiting.

Medical considerations No specific tes data are available.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Toxicity There is not enough data.

Acute aquatic toxicity

Acute toxicity - fish Ethylene glycol:
LC_{50}, 96 hours: 78860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates Ethylene glycol:
EC_{50}, 48 hours: >100 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

Phototransformation No specific test data are available.

Stability (hydrolysis) No specific test data are available.

Biodegradation No specific test data are available.

Biological oxygen demand No specific test data are available.

Chemical oxygen demand No specific test data are available.

12.3. Bioaccumulative potential

EXTENDED LIFE COOLANT

Bioaccumulative potential No specific test data are available.

Partition coefficient No specific test data are available.

12.4. Mobility in soil

Mobility Uygun bilgi bulunmamaktadır.

Adsorption/desorption coefficient No specific test data are available.

Henry's law constant No specific test data are available.

Surface tension No specific test data are available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Use the substance for its intended purpose and recycle if possible. If this product is to be disposed of, it must be disposed of as defined by international, national or local laws and regulations. The generation of waste should be minimised or avoided wherever possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

Road transport notes Not applicable.

Rail transport notes Not applicable.

Sea transport notes Not applicable.

Air transport notes Not applicable.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

EXTENDED LIFE COOLANT

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation T. C. The Ministry of Labor and Social Security, Implementing Regulation on Health and Safety Measures for Working with Chemical Substances, numbered 28733 dated August 12, 2013
T.C. Çalışma ve Sosyal Güvenlik Bakanlığı, 2 Temmuz 2013 tarihli, 28695 sayılı, Kişisel Koruyucu Donanımların İşyerlerinde Kullanılması Hakkında Yönetmelik.
T. C. Environment and urban ministry, mplementing Regulation on the Classification, Labeling and Packaging of Substances and Mixtures, No. 28848, dated December 11, 2013

Guidance Workplace Exposure Limits EH40.
CHIP for everyone HSG228.
Approved Classification and Labelling Guide (Sixth edition) L131.

Health and environmental listings Hazardous ingredients are listed.

15.2. Chemical safety assessment

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
E.U. : European union
KKE: Personal protective aquipment
STEL: Short term exposure limit
T.C. : Republic of Turkey
TWA: Workplace exposure limits
UZEM: National Poison Information Center
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
DNEL: Derived No Effect Level.
GHS: Globally Harmonized System.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, Bioaccumulative and Toxic substance.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms
Acute Tox. = Acute toxicity
STOT RE = Specific target organ toxicity-repeated exposure
Repr. = Reproductive toxicity

EXTENDED LIFE COOLANT

General information	This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters. Uses and Restrictions : This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. MSDS Distribution : The information in this document should be made available to all who may handle the product. Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Key literature references and sources for data	This SDS is prepared based on the information received from raw material suppliers.
Issued by	Sevda ŞAHAN Certified Safety Data Sheet Preparer (Certificate Id:GBF01.23.08;Dates: 03.11.2018-03.11.2021)
Revision date	26/02/2019
Revision	1
Supersedes date	26/02/2019
SDS number	20510
Hazard statements in full	H302 Harmful if swallowed. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure if swallowed or if inhaled.