EXTENDED LIFE COOLANT

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

1.1 - Product identifier

Trade name/designation EXTENDED LIFE COOLANT
Chemical name
Product-type Mixture
Product code 13500

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

Relevant identified uses	- Antifreeze fluid. - Special product for automotive industry.
Uses advised against	- The uses are provided in Section 1.2. Other uses are not recommended unless a risk assessment is carried out, prior to commencement of that use, which demonstrates that the is safe. - Do not use for products which come into direct contact with the skin. - Food additives - Do not use for products which come into contact with the food stuffs. - Do not use for private purposes (household).

1.3 - Details of the supplier of the safety data sheet

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

1.4 - Emergency telephone number

- National Poisons Information Service of England: http://npis.org -
NHS 111: dial 111 United Kingdom

- Company phone number (see section 1.3).

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Repr. 2	Reproductive toxicity - Category 2 (H361d)
STOT RE 2	STOT-repeated exposure - Category 2

2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: Ethylene glycol | Ethylene glycol | Sodium 2-ethylhexanoate

Signal word : Warning

EXTENDED LIFE COOLANT

Hazard pictograms

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 vapours/spray.
P264	Wash hands/face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear eye protection/protective gloves/protective clothing/face protection.
P301+P312	IF SWALLOWED: Call 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 to an appropriate recycling or disposal facility in accordance with national regulation.

EUH-phrases : None

2.3 - Other hazards

PBT-substance. - The substances in this mixture do not meet the PTB/vPvB criteria of REACH annex XIII.

vPvB-substance. - The substances in this mixture do not meet the PTB/vPvB criteria of REACH annex XIII.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No.	%	Class(es)	Specific concentration limit
Ethylene glycol	CAS No. : 107-21-1 Index No. : 603-027-00-1 EC No. : 203-473-3	>= 60 - 80	Acute Tox. 4 Oral - H302	Not applicable
Ethylene glycol	CAS No. : 107-21-1 Index No. : 603-027-00-1 EC No. : 203-473-3 REACH No. : 01-2119456816-28-0000	10 - 20	Acute Tox. 4 Oral - H302 STOT RE 2 - H373	Not applicable
Sodium 2-ethylhexanoate	CAS No. : 19766-89-3 Index No. : EC No. : 243-283-8	1 - 10	Repr. 2 - H361d	Not applicable

EXTENDED LIFE COOLANT

- There is no chemical substance to be specified under this section.

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation	- Provide fresh air. - When in doubt or if symptoms are observed, get medical advice. - Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.
Following skin contact	- After contact with skin, wash immediately with plenty of water and soap. - Remove contaminated clothing and shoes. - When in doubt or if symptoms are observed, get medical advice.
After eye contact	- Remove affected person from the danger area and lay down. - Rinse immediately carefully and thoroughly with eye-bath or water. - In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. - Protect uninjured eye.
After ingestion	- Rinse mouth thoroughly with water. - Do not leave affected person unattended. - Do NOT induce vomiting. - Seek medical advice immediately. - Never give anything by mouth to an unconscious person or a person with cramps. - When in doubt or if symptoms are observed, get medical advice.

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

Symptoms and effects - Following inhalation	- Headache. Nausea. Vomiting.
Symptoms and effects - Following skin contact	- No known symptoms to date. - In rare cases the product can cause temporary erythema of the skin. - Itching.
Symptoms and effects - After eye contact	- Itching. - Redness.
Symptoms and effects - After ingestion	- Nausea - Vomiting

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

- No information available.
- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

EXTENDED LIFE COOLANT

Suitable extinguishing media	- Carbon dioxide (CO2) - Dry sand - Dry extinguishing powder - Alcohol resistant foam
Unsuitable extinguishing media	- Strong water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture	- In case of fire hazardous decomposition products may be formed, such as: Carbon monoxide, Carbon dioxide (CO2). - In case of combustion, emission of toxic fumes. - Thermal decomposition results in the formation of smoke, carbon oxides and low molecular weight organic compounds of unknown composition.
Hazardous decomposition products	- Formation of CO and CO2 in the event of combustion (carbon monoxide - carbon dioxide).

5.3 - Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing.
- Move undamaged containers from immediate hazard area if it can be done safely.
- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	- Use personal protection equipment. - Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. - Provide adequate ventilation. - Caution: Spreads are slippery - Avoid breathing vapours, mist, spray, fumes.
For emergency responders	- Provide adequate ventilation. - Use personal protection equipment. - Mittens. - Spectacles. - NOTICE: Report spillage to local authorities as appropriate or necessary. - If it can be done without risk, stop the source of leakage. - Limit spillage to prevent further contamination of soil, surface or groundwater. - Use appropriate techniques such as non-flammable absorbent materials or pumping. - Where possible or appropriate, scrape off the soil contaminated by the product from the area. - Place product contaminated materials in disposable containers and dispose of in accordance with regulations. - In case of spillage of a heated substance, allow it to cool down before proceeding with disposal methods. - Provide adequate ventilation.

6.2 - Environmental precautions

- Ensure waste is collected and contained.
- Do not allow to enter into surface water or drains.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment	- Soak up inert absorbent and dispose as waste requiring special attention. - Collect in closed and suitable containers for disposal.
Methods and material for cleaning up	- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). - Ventilate affected area. - Clear contaminated areas thoroughly. - Clean contaminated articles and floor according to the environmental legislation. - Refer to manufacturer or supplier for information on recovery or recycling. - Do not allow to enter into surface water or drains. - If the product contaminates water tables, rivers or sewers, alert the competent authorities according to regulatory procedures.
Inappropriate techniques	- Never return spills to original containers for reuse.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8
- Safe handling: see section 7
- See Section 1 for emergency contact information.

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation	- It is recommended to design all work processes always so that the following is excluded:Eye contact - Ensure sufficient ventilation. - Avoid breathing vapours, mist, spray, fumes. - Keep away from sources of ignition - No smoking.
Advices on general occupational hygiene	- Avoid contact with skin, eyes and clothes. - Wash contaminated clothing prior to re-use. - Immediately remove any contaminated clothing, shoes or stockings. - Wash hands before breaks and after work. - Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. - If exposure limits have not been observed maintain airborne levels at an acceptable level. Provide eye wash station and safety shower.

7.2 - Conditions for safe storage, including any incompatibilities

- Keep/store only in original container.
- Keep container tightly closed in a cool, well-ventilated place.
- Protect against:Heat
- Keep away from:Food and feedingstuffs
- Protect from direct sunlight.

EXTENDED LIFE COOLANT

7.3 - Specific end use(s)

- See section 1.2 of the SDS.

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

Ethylene glycol (107-21-1)	
IOELV TWA mg/m³ (UE)	52 mg/m³ Skin
IOELV TWA ppm (UE)	20 ppm Skin
IOELV STEL mg/m³ (UE)	104 mg/m³ Skin
IOELV STEL ppm (UE)	40 ppm Skin
IOELV TWA mg/m³ (UE)	52 mg/m³ Skin
IOELV TWA ppm (UE)	20 ppm Skin
IOELV STEL mg/m³ (UE)	104 mg/m³ Skin
IOELV STEL ppm (UE)	40 ppm Skin

- No exposure limit value is known.
- There is no chemical substance to be specified under this section.

DNEL / PNEC

Ethylene glycol (107-21-1)			
Type	**Value**	**User**	**Effect**
DNEL long-term inhalative	35 mg/m³	Workers	Local
DNEL long-term inhalative	7 mg/m³	Consumers	Local
DNEL long-term dermal	106 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	53 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	35 mg/m³	Workers	Local
DNEL long-term inhalative	7 mg/m³	Consumers	Local
DNEL long-term dermal	106 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	53 mg/kg bw/day	Consumers	Systemic

Sodium 2-ethylhexanoate (19766-89-3)			
Type	**Value**	**User**	**Effect**
DNEL long-term oral (repeated)	1 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	14 mg/m³	Workers	Systemic
DNEL long-term inhalative	3,5 mg/m³	Consumers	Systemic
DNEL long-term dermal	2 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	1 mg/kg bw/day	Consumers	Systemic
PNEC aquatic, freshwater	0,36 mg/l		
PNEC aquatic, marine water	0,036 mg/l		
PNEC aquatic, intermittent release	0,493 mg/l		
PNEC sediment, freshwater	0,301 mg/kg		
PNEC sediment, marine water	0,03 mg/kg		
PNEC soil	0,058 mg/kg		
PNEC sewage treatment plant (STP)	71,7 mg/l		

8.2 - Exposure controls

Appropriate engineering controls

- Do not eat, drink or smoke during use.
- Ensure adequate ventilation.
- Local exhaust ventilation is recommended.
- If exposure limits have not been observed maintain airborne levels at an acceptable level. Provide eye wash station and safety shower.

EXTENDED LIFE COOLANT

- Avoid contact with skin and eyes.
- In the case of work in confined spaces (tanks, reservoirs, etc.), ensure a breathable atmosphere and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

- Lab coat.

- Eye protection

- Tight-fitting goggles.
- In case of risk of splashes: Goggles with side-shields.
- EN 166
- Protective gloves

- Chemical resistant gloves conforming to EN 374.
- Wear suitable chemical resistant gloves.
- Nitrile rubber
- PVA (Polyvinyl alcohol).
- Protective apron.
- Suitable protective clothing:Protective apron

- If there is a danger of contact with hot product, suitable protective equipment must be used, which protects against high temperatures.
- Use only respiratory protection equipment with CE-symbol including four digit test number.
- Clean the equipment and work area daily.
- Observe good industrial hygiene.

Environmental exposure controls

- It is important to test emissions from ventilation systems or process equipment to ensure that they comply with the requirements of environmental protection legislation.
- The floor of the storage room should be impermeable to prevent leakage of liquids.
- Containers should be kept tightly closed when not in use.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Liquid	Appearance	Liquid
Colour	pink	Odour	characteristic

Odour threshold	No information available.

EXTENDED LIFE COOLANT

pH	8,4 in 33% aqueous solution
Melting point	No information available.
Freezing point	No information available.
Boiling point	No information available.
Flash point	Not relevant.
Evaporation rate	No information available.
flammability	Not relevant.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Density	1,11 g/ml @20°C
Solubility (Water)	Soluble
Solubility (Ethanol)	Soluble
Solubility (Acetone)	No information available.
Solubility (Organic solvents)	No information available.
Log KOC	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Kinematic viscosity	No information available.
Dynamic viscosity	No information available.

Particle characteristics

Particle size	No data available
Dustiness	No data available
Specific surface area	No data available
Shape	No data available

9.2 - Other information

VOC content	Undetermined
Minimum ignition energy	No data available
Conductivity	No data available
Refractive index	No data available
Solids content	No data available
Surface tension	No data available
Saturation concentration	No data available

- No data available.

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

EXTENDED LIFE COOLANT

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- Stable under recommended storage and handling conditions.
- Keep away from: strong acids and strong oxidants.

10.5 - Incompatible materials

- Strong acids.
- Strong oxidising agents.
- Chlorates
- Nitrates
- Peroxides

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.
- In combustion emits toxic fumes.
- Carbon dioxide (CO2)
- Carbon monoxide

SECTION 11: Toxicological information

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

Acute toxicity - Acute toxicity (oral) - Category 4 - Harmful if swallowed.

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation gas (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- Harmful if swallowed.

Toxicity : Substances

Ethylene glycol (107-21-1)	
LD50 oral (rat)	500 mg/kg ATE
LD50 oral (rat)	500 mg/kg ATE

Sodium 2-ethylhexanoate (19766-89-3)	
LD50 oral (rat)	2043 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
LD50 dermal (rat)	> 2000 mg/kg (OECD Guideline 402, Acute Dermal Toxicity)

EXTENDED LIFE COOLANT

Skin corrosion/irritation	- Not classified
	- Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	- Not classified
	- Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	- Not classified
	- Based on available data, the classification criteria are not met.
Germ cell mutagenicity	- Not classified
	- Based on available data, the classification criteria are not met.
Carcinogenicity	- Not classified
	- Based on available data, the classification criteria are not met.
Reproductive toxicity	- Reproductive toxicity - Category 2 (H361d) - Suspected of damaging the unborn child.
STOT-single exposure	- Not classified
	- Based on available data, the classification criteria are not met.
STOT-repeated exposure	- STOT-repeated exposure - Category 2 - May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	- Not classified
	- Based on available data, the classification criteria are not met.

11.2 - Information on other hazards

- This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

- The product has not been tested.
- Based on available data, the classification criteria are not met.

Toxicity : Substances

Ethylene glycol (107-21-1)	
LC50 96 hr fish	53000 mg/l Pimephales promelas (fathead minnow)
NOEC chronic crustacea	8590 mg/l Daphnia magna (Big water flea)
LC50 96 hr fish	53000 mg/l Pimephales promelas (fathead minnow)
NOEC chronic crustacea	8590 mg/l Daphnia magna (Big water flea)

Sodium 2-ethylhexanoate (19766-89-3)	
EC50 48 hr crustacea	85,4 mg/l Daphnia magna
LC50 96 hr fish	180 mg/l Oryzias latipes (Ricefish) OECD 203
ErC50 algae	49,3 mg/l Scenedesmus subspicatus
NOEC chronic crustacea	25 mg/l Daphnia magna OECD 211

12.2 - Persistence and degradability

Mixture

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- Depending on the ingredients in the product, easy biodegradation is expected.

Substances

Ethylene glycol (107-21-1)	
% of biodegradation in 28 days	83 % < V < 96 % Readily biodegradable (according to OECD criteria). OECD 301C
% of biodegradation in 28 days	83 % < V < 96 % Readily biodegradable (according to OECD criteria). OECD 301C

Sodium 2-ethylhexanoate (19766-89-3)	
% of biodegradation in 28 days	99 % Readily biodegradable (according to OECD criteria). OECD 301E

12.3 - Bioaccumulative potential

Mixture

EXTENDED LIFE COOLANT

Bioconcentration factor (BCF)	No data available
Log KOC	No information available.

- No indication of bioaccumulation potential.
- There is no bioaccumulating substance in the product.

Substances

Ethylene glycol (107-21-1)	
Log KOC	-1,36 No bioaccumulation potential.
Log KOC	-1,36 No bioaccumulation potential.

Sodium 2-ethylhexanoate (19766-89-3)	
Log KOC	1,3 No bioaccumulation potential.

12.4 - Mobility in soil

- Soluble in water.
- The substance will slowly evaporate into the atmosphere from the water surface.

12.5 - Results of PBT and vPvB assessment

- The substances in this mixture do not meet the PTB/vPvB criteria of REACH annex XIII.

- The substances in this mixture do not meet the PTB/vPvB criteria of REACH annex XIII.

12.6 - Endocrine disrupting properties

- This product does not have endocrine disrupting properties.

12.7 - Other adverse effects

- No data available.
- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods	- Dispose of waste according to applicable legislation. - Handle contaminated packages in the same way as the substance itself.
Sewage disposal	- Do not empty into drains.
Special precautions for waste treatment	- Consult the appropriate local waste disposal expert about waste disposal. - The waste is to be kept seperate from other types of waste until its recycling. - For recycling, contact recycling exchanges. - Non-contaminated packages must be recycled or disposed of.
Community or national or regional provisions	- Dispose of waste according to applicable legislation.

SECTION 14: Transport information

14.1 - UN number or ID number

EXTENDED LIFE COOLANT

Not applicable

14.2 - UN proper shipping name
Not applicable

14.3 - Transport hazard class(es)
Not applicable

14.4 - Packing group
Not applicable

14.5 - Environmental hazards
Not applicable

14.6 - Special precautions for user
Not applicable

14.7 - Maritime transport in bulk according to IMO instruments
Not applicable

- Not applicable.

SECTION 15: Regulatory information

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

Substances REACH candidates	None
Substances Annex XIV	None
Substances Annex XVII	None
VOC content	No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product	- A chemical safety assessment has been conducted for this mixture.

SECTION 16: Other information

SDS versions

Version	Issue date	Author	Description of the amendments
4	17/02/2025		Updated according to current legislation.
3	23/01/2024		Updated according to current legislation.
1	26/02/2019		It was prepared for the first time.

Certificate holder Ece Yigit - Chemical Assessment Specialist (Certificate No: KDU01.30.08 18.02.2028 - Certificate valid for 5 years)

Abbreviations and acronyms	- ADR: The Agreement concerning the International Carriage of Dangerous Goods by Road - ATE: Acute Toxicity Estimate. - CAS No.: Chemical Abstracts Service number. - DNEL: Derived no-effect level.

EXTENDED LIFE COOLANT

- EC No: European Community number
- EC50: Effective concentration of the substance that causes adverse effects in 50% of test animals.
- IATA: International Air Transport Association.
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods.
- LC50: Lethal Concentration to 50 % of a test animals.
- LD50: Lethal Dose to 50% of a test animals.
- OEL: Occupational exposure limit.
- PBT: Persistent, Bioaccumulative and Toxic.
- PNEC: Predicted no-effect concentration.
- RID: International Carriage of Dangerous Goods by Rail.
- STEL: Short-term exposure limit
- TWA: Time weighted average
- vPvB: very Persistent and very Bioaccumulative.

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Repr. 2	Reproductive toxicity - Category 2 (H361d)
STOT RE 2	STOT-repeated exposure - Category 2

The information provided in this Safety Data Sheet (SDS) is current on the date the SDS was prepared or revised. Implementation of measures that are provided on SDS is under downstream user companies' responsibility. Downstream users may change the measures in the SDS according to the conditions in their own business.

*** *** ***