

TMS Oil 973

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

1.1 - Product identifier

Trade name/designation TMS Oil 973

Chemical name

Product-type Mixture

Product code 12241

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

Relevant identified uses

- Transmission oil.
- 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.

1.3 - Details of the supplier of the safety data sheet

PETROL OF S. A.

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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]

Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
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2.2 - Label elements

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

Signal word : None

Pictograms : None

Hazard statements

H412	Harmful to aquatic life with long lasting effects.
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Precautionary statements

P273	Avoid release to the environment.
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P501	Dispose of contents/container to an appropriate recycling or disposal facility in accordance with national regulation.
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EUH-phrases	: None
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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
Lubricating oil(Heavy Neutral Base Oil) [Note L]	CAS No. : 74869-22-0 Index No. : 649-484-00-0 EC No. : 278-012-2	80 - 95	Not Classified	Not applicable
Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased]	CAS No. : 90480-91-4 EC No. : 291-829-9	1 - 5	Not Classified	Not applicable
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	CAS No. : 68649-42-3 Index No. : EC No. : 272-028-3	1 - 5	Eye Irrit. 2 - H319 Skin Irrit. 2 - H315	Not applicable
phenol, dodecyl-, branched	CAS No. : 121158-58-5 Index No. : 604-092-00-9 EC No. : 310-154-3	< 0,25	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Eye Dam. 1 - H318 Repr. 1B - H360F Skin Corr. 1C - H314	M-factor: 10 / 10

- Note L: DMSO content <3% according to IP 346.

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation

- Provide fresh air.
- Rinse nose and mouth with water.
- When in doubt or if symptoms are observed, get medical advice.

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.

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- 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 - No known symptoms to date.

Symptoms and effects - Following skin contact - The following symptoms may occur: Skin irritation.
- Itching.

Symptoms and effects - After eye contact - Irritating in case of direct contact with eyes.
- Itching.
- Redness.

Symptoms and effects - After ingestion - Nausea

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

Suitable extinguishing media - The product is not flammable. Use a suitable extinguishing agent to control the fire.

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.

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- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Provide adequate ventilation.
- Caution: Spreads are slippery

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

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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.

7.3 - Specific end use(s)

- See section 1.2 of the SDS.

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

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

DNEL / PNEC

phenol, dodecyl-, branched (121158-58-5)

Type	Value	User	Effect
DNEL long-term oral (repeated)	0,075 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	1,762 mg/m ³	Workers	Systemic
DNEL long-term inhalative	0,79 mg/m ³	Consumers	Systemic
DNEL long-term dermal	0,25 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	0,075 mg/kg bw/day	Consumers	Systemic
PNEC aquatic, freshwater	7,4E-05 mg/l		
PNEC aquatic, marine water	7E-06 mg/l		
PNEC aquatic, intermittent release	0,00037 mg/l		
PNEC sediment, freshwater	0,226 mg/kg		
PNEC sediment, marine water	0,0226 mg/kg		
PNEC soil	0,118 mg/kg		
PNEC Secondary Poisoning	4 mg/kg		
PNEC sewage treatment plant (STP)	100 mg/l		

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Lubricating oil(Heavy Neutral Base Oil) [Note L] (74869-22-0)

Type	Value	User	Effect
DNEL long-term oral (repeated)	0,74 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	2,73 mg/m ³	Workers	Systemic
DNEL long-term inhalative	5,58 mg/m ³	Workers	Local
DNEL long-term dermal	0,97 mg/kg bw/day	Workers	Systemic
PNEC Secondary Poisoning	9,33 mg/kg		

8.2 - Exposure controls

Appropriate engineering controls

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

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.

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.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

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<u>Physical state</u>	Solid	<u>Appearance</u>	Gel characteristic
<u>Colour</u>	yellow	<u>Odour</u>	
Odour threshold		No information available.	
pH		No information available.	
Melting point		No information available.	
Freezing point		No information available.	
Boiling point		No information available.	
Flash point		> 220 °C Open vase	
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		0,898 g/ml @15°C	
Solubility (Water)		Insoluble	
Solubility (Ethanol)		No information available.	
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		9,3 mm ² /s < V < 12,5 mm ² /s (cSt) @100°C	
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

- Worked Penetration 270 (@ 25°C)

SECTION 10: Stability and reactivity

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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.

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.
- The product can decompose at high temperature.

10.5 - Incompatible materials

- Strong oxidising agents.

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

- Not classified

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

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

Toxicity : Substances

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
LD50 oral (rat)	3195 mg/kg
LD50 dermal (rabbit)	3160 mg/kg
phenol, dodecyl-, branched (121158-58-5)	
LD50 oral (rat)	2100 mg/kg (OECD Guideline 401, Acute Oral Toxicity)

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LD50 dermal (rabbit)	15000 mg/kg (OECD Guideline 402, Acute Dermal Toxicity)
Lubricating oil(Heavy Neutral Base Oil) [Note L] (74869-22-0)	
LD50 oral (rat)	> 5000 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
LD50 dermal (rat)	(OECD Guideline 403, Acute inhalation toxicity) There were no deaths during the study.

<u>Skin corrosion/irritation</u>	- Not classified
<u>Serious eye damage/eye irritation</u>	- Not classified
<u>Respiratory or skin sensitisation</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>Germ cell mutagenicity</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>Carcinogenicity</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>Reproductive toxicity</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>STOT-single exposure</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>STOT-repeated exposure</u>	- Not classified
	- Based on available data, the classification criteria are not met.
<u>Aspiration hazard</u>	- 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

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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.
- May cause long lasting harmful effects to aquatic life.

Toxicity : Substances

phenol, dodecyl-, branched (121158-58-5)	
EC50 48 hr crustacea	0,037 mg/l Daphnia magna (Big water flea) OECD 202
LC50 96 hr fish	40 mg/l Pimephales promelas (fathead minnow) OECD 203
ErC50 algae	0,36 mg/l Scenedesmus subspicatus OECD 201
NOEC chronic crustacea	0,004 mg/l Daphnia magna (Big water flea) OECD 211
NOEC chronic algae	0,07 mg/l Scenedesmus subspicatus
Lubricating oil(Heavy Neutral Base Oil) [Note L] (74869-22-0)	
EC50 48 hr crustacea	> 100 mg/l Daphnia magna (Big water flea)
LC50 96 hr fish	> 100 mg/l Pimephales promelas (fathead minnow)
ErC50 algae	> 100 mg/l Pseudokirchneriella subcapitata

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

- No information available.
- The product contains a substance that does not degrade easily.

Substances

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Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
% of biodegradation in 28 days	18 % Poorly biodegradable. Quantitative structure-activity relationship (QSAR)
phenol, dodecyl-, branched (121158-58-5)	
% of biodegradation in 28 days	< 10 % Not readily biodegradable (according to OECD criteria).
Lubricating oil(Heavy Neutral Base Oil) [Note L] (74869-22-0)	
% of biodegradation in 28 days	2 % < V < 4 % Not readily biodegradable (according to OECD criteria).

12.3 - Bioaccumulative potential

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

- The product has not been tested.
- The product contains a bioaccumulating substance.

12.4 - Mobility in soil

- The product is immiscible with water and will spread on the surface of water.

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

<u>Endocrine disruptors</u>	phenol, dodecyl-, branched (Index No.: 604-092-00-9 - EC No.: 310-154-3 - CAS No.: 121158-58-5)
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- 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

<u>Waste treatment methods</u>	<ul style="list-style-type: none"> - Dispose of waste according to applicable legislation. - Handle contaminated packages in the same way as the substance itself.
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<u>Sewage disposal</u>	<ul style="list-style-type: none"> - Do not empty into drains.
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<u>Special precautions for waste treatment</u>	<ul style="list-style-type: none"> - Consult the appropriate local waste disposal expert about waste disposal. - The waste is to be kept separate from other types of waste until its recycling. - For recycling, contact recycling exchanges. - Non-contaminated packages must be recycled or disposed of.
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Community or national or regional provisions - Dispose of waste according to applicable legislation.

SECTION 14: Transport information

14.1 - UN number or ID number

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 phenol, dodecyl-, branched (Index No.: 604-092-00-9 - EC No.: 310-154-3 - CAS No.: 121158-58-5)
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
6	21/02/2025		Updated according to current legislation.
5	25/03/2024		Updated according to current legislation.
1	13/06/2011		It was prepared for the first time.

Issued by: Sena Ezgi Selçuk

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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.
- 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

Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation - Category 2
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Not Classified	Not classified
Repr. 1B	Reproductive toxicity - Category 1B (H360F)
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Irritation, 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.

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