



SAFETY DATA SHEET TURBINE OIL TX-46

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.
Commission Regulation (EU) 2020/878 of 18 June 2020.

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

1.1. Product identifier

Product name TURBINE OIL TX-46

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

Identified uses Industrial oil

Uses advised against This product must not be used outside of the practices recommended in Section 1 without prior advice from the supplier.

1.3. Details of the supplier of the safety data sheet

Supplier PETROL OFİSİ A.Ş.
Ünalın Mahallesi, Libadiye Caddesi No: 82F Kat: 2-3-4, 34700 Üsküdar/ İstanbul
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 Müşteri Hizmetleri: 0850 339 19 19 (mesai saatleri)

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Chronic 3 - H412

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

2.2. Label elements

Hazard statements H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains Aryl amine. May produce an allergic reaction.

Precautionary statements P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

As supplied, the material does not present a health hazard.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Lubricating Oils, complex combination of hydrocarbons obtained from solvent extraction and dewaxing.(C15-C50) CAS number: 74869-22-0 EC number: 278-012-2 See Section 8 for occupational exposure limits.	95-100%
Classification Not Classified	
Alkyl phenol CAS number: — M factor (Acute) = 1 M factor (Chronic) = 1	<1%
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
Aryl amine CAS number: — M factor (Acute) = 1 M factor (Chronic) = 1	<1%
Classification Acute Tox. 4 - H302 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

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

Composition comments Some substances are not classified by legislation.They are self classified by the manufacturer. The DMSO extract by IP 346 of the oil is less than 3%

Ingredient notes See Section 8 for occupational exposure limits.

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. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
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 if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.



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

General information	Treat symptomatically.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	No specific symptoms known.
Eye contact	No specific symptoms known.

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

Notes for the doctor	Treat symptomatically.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Not known.
Hazardous combustion products	A complex mixture of airborne solids, liquids and gases can be released. Carbon monoxide (CO). Oxides of sulphur. Unidentified organic or inorganic compounds. Oxides of carbon. Carbon dioxide (CO ₂).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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.
For non-emergency personnel	Necessary precautions should be taken to ensure that non-educated personnel do not intervene.
For emergency responders	Notification: In case of spillage, notify the local authorities as appropriate or as necessary. Stop the leakage source if it can be done without risk. Limit spillage to prevent further contamination of soil, surface or ground water. Remove any spilled material as soon as possible by following the precautions in the section Exposure Controls / Personal Protection. Use suitable techniques such as non-flammable absorbent materials or pumping. When possible or appropriate, remove the contaminated soil from the area. Place contaminated products in disposable boxes and dispose of in accordance with regulations. If a heated material is spilled, allow it to cool before handling with disposal methods.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up



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Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections 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.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented.

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.

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

Occupational exposure limits

There is no available data.

Lubricating Oils, complex combination of hydrocarbons obtained from solvent extraction and dewaxing.(C15-C50)

None of the components has assigned exposure limits.

Ingredient comments Oil Mist TWA: 5 mg /m³ (ACGIH). Distillates (petroleum) hydrotreated heavy parafinic: EU OEL (Eu.) TWA: 5 mg/m³ (8 h.)

Biological limit values There is no available data.

DNEL There is no available data.

DMEL There is no available data.

PNEC There is no available data.

Lubricating Oils, complex combination of hydrocarbons obtained from solvent extraction and dewaxing.(C15-C50) (CAS: 74869-22-0)

Ingredient comments There is no approximate limit value for this product. Steam, fog or smoke should be controlled to the lowest possible level.

Biological limit values No information available.

DNEL No information available.

DMEL No information available.



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PNEC

No information available.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
Personal protection	Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.
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	Store in a demarcated bunded area to prevent release to drains and/or watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow.
Odour	Characteristic.
Odour threshold	No specific test data are available.
pH	Scientifically unjustified.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	min. 188°C OC (Open cup).
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.



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Upper/lower flammability or explosive limits	No specific test data are available.
Other flammability	No specific test data are available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0,90 g/ml @ 15°C
Bulk density	~ 0,887 @15°C g/ml
Solubility(ies)	Insoluble in water.
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	41,4-50,6 cSt @ 40°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No suitable data is available.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.
Particle characteristic	Not applicable.
9.2. Other information	
Other information	No information required.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions



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Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid contact with the following materials: Oxidising agents. Reducing agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂). Methacrylates. Oil vapors in case of overheating.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Other health effects No relevant information available.

Toxicological effects Information given is based on product data, a knowledge of the components and the toxicology of similar products.

Acute toxicity - oral

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

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

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

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

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

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

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

Skin corrosion/irritation Based on available data the classification criteria are not met.

Animal data Inconclusive data.

Human skin model test Inconclusive data.

Extreme pH Inconclusive data.

Serious eye damage/irritation

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

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

Respiratory sensitisation

Summary Based on available data, the classification criteria are not met. Mist may cause slight irritation if inhaled.



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Respiratory sensitisation	Inconclusive data.
Skin sensitisation	
Summary	Does not meet the classification criteria.
Skin sensitisation	Inconclusive data.
Germ cell mutagenicity	
Summary	It is not expected to cause genetic damage in the light of current data.
Genotoxicity - in vitro	Inconclusive data.
Genotoxicity - in vivo	Inconclusive data.
Carcinogenicity	
Summary	The base oils in the product content contain less than 3% DMSO according to IP 346.
Carcinogenicity	Based on available data the classification criteria are not met.
Target organ for carcinogenicity	No specific target organs known.
Reproductive toxicity	
Summary	There is no test data indicating that this product has a toxic effect on the reproductive system.
Reproductive toxicity - fertility	Inconclusive data.
Reproductive toxicity - development	No information is required.
Specific target organ toxicity - single exposure	
Summary	There is no available data.
STOT - single exposure	Inconclusive data.
Target organs	No specific target organs known.
Specific target organ toxicity - repeated exposure	
Summary	There is no available data.
STOT - repeated exposure	Inconclusive data.
Target organs	No specific target organs known.
Aspiration hazard	
Summary	Slight irritation of the respiratory tract may occur, if mists are inhaled.
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.
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May cause discomfort if swallowed.
Skin contact	Liquid may irritate skin.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.



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Acute and chronic health hazards	There is not enough data.
Route of exposure	There is no available data.
Target organs	No specific target organs known.
Medical symptoms	No specific tes data are available.
Medical considerations	No specific tes data are available.
11.2 Information on other hazards	
Information on other hazards	This substance does not have endocrine disrupting properties.

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	
Summary	Based on available information, the classification criteria are not met.
Acute toxicity - fish	Based on available data the classification criteria are not met.
Acute toxicity - aquatic invertebrates	Based on available data the classification criteria are not met.
Acute toxicity - aquatic plants	Based on available data the classification criteria are not met.
Acute toxicity - microorganisms	Based on available data the classification criteria are not met.
Acute toxicity - terrestrial	No information required.
Chronic aquatic toxicity	
Summary	Based on available information, the classification criteria are not met.
Chronic toxicity - fish early life stage	No information required.
Short term toxicity - embryo and sac fry stages	No information required.
Chronic toxicity - aquatic invertebrates	Based on available data the classification criteria are not met.
Toxicity to soil	There is not enough data.
Toxicity to terrestrial plants	There is not enough data.
12.2. Persistence and degradability	
Persistence and degradability	Based on available information, the classification criteria are not met.
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.



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Chemical oxygen demand	No specific test data are available.
12.3. Bioaccumulative potential	
Bioaccumulative potential	No information required.
Partition coefficient	No specific test data are available.
12.4. Mobility in soil	
Mobility	The product is immiscible with water and will spread on the water surface.
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	No data available.
12.6 Endocrine disrupting properties	
Endocrine disrupting properties	This product does not have endocrine disrupting properties.
12.6. Other adverse effects	
Other adverse effects	This product contains components that have a harmful effect on the aquatic environment. Do not allow to enter into soil, rivers or sewers.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible.
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	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
Road transport notes	Not classified.
Rail transport notes	Not classified.
Sea transport notes	Not classified.
Air transport notes	Not classified.
14.1. UN number	
UN number or ID number	Not applicable.
14.2. UN proper shipping name	



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Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Maritime transport in bulk according to IMO instruments Not applicable.

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 T. C. Regulation on the Classification, Labeling and Packaging of Substances and Mixtures No. 28848, dated 11 December 2013, by the Ministry of Environment and Urbanization.
T. C. Ministry of Environment and Urbanization Regulation on Safety Data Sheets on Hazardous Substances and Mixtures

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.
Dangerous Preparations Directive 1999/45/EC.
Dangerous Substances Directive 67/548/EEC.

Guidance Safety Data Sheets for Substances and Preparations.

Health and environmental listings Hazardous ingredients are listed.

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15.2. Chemical safety assessment

SECTION 16: Other information



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Abbreviations and acronyms used in the safety data sheet	<p>DMSO: Dimethyl sulfoxide E.U. : European union KKE: Personal protective equipment T.C. : Republic of Turkey TWA: Workplace exposure limits UZEM: National Poison Information Center ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: 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. NOEC: No Observed Effect Concentration. EC₅₀: 50% of maximal Effective Concentration.</p>
General information	<p>Only trained personnel should use this material. 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. 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.</p>
Key literature references and sources for data	<p>This SDS is prepared based on the information received from raw material suppliers. Source: European Chemicals Agency, http://echa.europa.eu/</p>
Classification procedures according to Regulation (EC) 1272/2008	<p>Not classified for health hazards.: Calculation method., Supplier information Not classified for environmental hazards.: Calculation method., Supplier information Not classified for physical hazards.: Calculation method., Supplier information</p>
Training advice	<p>Untrained personnel should not use.</p>
Revision comments	<p>Revised classification.</p>
Issued by	<p>Sena Ezgi Selçuk Chemical Assessment Specialist (Certificate No: KDU01.29.06 17.12.2027)</p>
Revision date	<p>20/01/2025</p>
Revision	<p>4</p>
Supersedes date	<p>17/06/2011</p>
SDS number	<p>10274</p>
SDS status	<p>Approved.</p>
Hazard statements in full	<p>H302 Harmful if swallowed. H317 May cause an allergic skin reaction. 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. EUH208 Contains Aryl amine. May produce an allergic reaction.</p>



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This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.