TÜBİTAK
ULUSAL METROLOJİ ENSTİTÜSÜ

TÜBİTAK UME

Certificate of the Reference Material

TÜRKAK Reference Material Producer TS EN ISO 17034 AB-0001-RM

Name of the Material	:	Multiparameter in Diesel
Material Code	:	UME CRM 1501
Issue Date	:	23.03.2016
Revision Date	:	16.12.2025 (Revision history can be found on the last page)
Validity Period of the Certificate	:	1 year from the sales date
Certified Values	:	

Parameter	Certified Value [4]	Uncertainty [5]
Cold Filter Plugging Point [1]	-21.1 °C	1.6 °C
Kinematic Viscosity [2] (at 40 °C)	2.506 mm^2/s	0.007 mm^2/s
Density [3] (at 15 °C)	825.82 kg/m^3	0.05 kg/m^3

[1] As defined by the measurement method/procedure specified in the TS EN 116 standard.
[2] As defined by the measurement method/procedure specified in the TS 1541 EN ISO 3104/T1 standard.
[3] As defined by the measurement method/procedure specified in the TS EN ISO 12185 standard.
[4] Calculated from the unweighted mean of the accepted results submitted by different laboratories. The certified values are traceable to the International System of Units (SI).
[5] The expanded uncertainty of certified value includes characterization, homogeneity, stability components and is stated as the standard uncertainty of measurement multiplied by the coverage factor *k*=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with GUM “Guide to the Expression of Uncertainty in Measurement”.

TÜBİTAK UME has been accredited by TÜRKAK as a reference material producer under the accreditation number AB-0001-RM in accordance with the TS EN ISO 17034:2018 standard.

Turkish Accreditation Agency (TÜRKAK) is a signatory to the European Cooperation for Accreditation (EA) Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of reference material certificates.

Sales Date

Assoc. Prof. Mustafa ÇETİNTAŞ
Director

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Description

The material is about 500 mL of diesel in an amber glass bottle.

Intended Use

This material is intended to be used for method development, method validation, verification and quality control purposes for the measurement of cold filter plugging point, kinematic viscosity (at 40 °C) and density (at 15 °C) parameters.

Instructions for Use

TS EN 116, TS 1541 EN ISO 3104/T1 and TS EN ISO 12185 standard methods must be used for the determination of cold filter plugging point, kinematic viscosity (at 40 °C) and density (at 15 °C), respectively. Measurements shall be carried out on sample amounts indicated in the standard methods. The material can be safely dispatched at ambient temperature where the temperature does not exceed 50 °C and the transportation period of 4 weeks.

Storage Conditions

The material should be stored at (20 ± 4) °C, in a dark and clean environment. TÜBİTAK UME cannot be held responsible for changes that might happen to the material at customer's premises due to noncompliance of the instructions for use, and the storage conditions given in the certificate.

Safety Information

Material contains diesel. It is strongly recommended that the material must be handled and disposed according to the safety guidelines where applicable. All safety precautions, e.g. working in a fume hood and or using suitable masks, must be taken. All precautions for flammable materials are also valid for this material. Please refer to the Safety Datasheet before any use of the material.

Participants

Information about the laboratories participated in the characterization study are given in the following table.

Laboratory	Address
TÜBİTAK UME	TÜBİTAK Gebze Yerleşkesi, Barış Mahallesi, Dr. Zeki Acar Caddesi No.1, 41470 Gebze - Kocaeli / Türkiye
İnönü Üniversitesi Petrol Araştırma Laboratuvarı (PAL)	İnönü Üniversitesi Mühendislik Fakültesi Kimya Mühendisliği Bölümü 44280 Malatya/ TURKEY
KTÜ-YUAM	Karadeniz Teknik Üniversitesi Prof. Dr. Saadettin Güner Yakıt Uygulama Araştırma Merkezi 61080 Trabzon/ TURKEY
OMV POAŞ-İzmir	İzmir Aliağa Terminal Müdürlüğü Siteler Mah. Petrol Ofisi Cad. No: 10 35800 Aliağa - İzmir/ TURKEY
OMV-POAŞ-Haramidere	Haramidere Terminali Avcılar - İstanbul/ TURKEY
OPET-MARLAB	Merkez Mah. Ereğli Cad. No:78 Sultanköy Marmara Ereğlisi - Tekirdağ/ TURKEY
OPET-MERLAB	Karaduvar Mah. 1031 Sok. No:4 Mersin/ TURKEY
OPET-KORLAB	Güney Mah. Hamit Kaptan Sok No:8 41780 Körfez - Kocaeli/ TURKEY
TÜBİTAK MAM Enerji Enstitüsü	TÜBİTAK Gebze Yerleşkesi Barış Mah. Dr. Zeki Acar Cad. No.1 41470 Gebze - Kocaeli/ TURKEY
TÜPRAŞ İzmir Rafinerisi	Atatürk Mah. İnönü Bulvarı No: 52 35800 Aliağa - İzmir/ TURKEY
TÜPRAŞ İzmit Rafinerisi	Güney Mah. Petrol Cad. No: 25/1 41780 Körfez - Kocaeli/ TURKEY

Methods and/or Techniques Used for the Determination of the Certified Values

Information about the methods and/or techniques are given below.

Method/Technique	Parameter
TS EN 116	Cold Filter Plugging Point
TS 1541 EN ISO 3104/T1	Kinematic viscosity
TS EN ISO 12185	Density

Revision History

Date	Remarks
23.03.2016	First issue.
23.11.2018	Certificate is updated due to format change of the document.
18.09.2019	Information about shipping conditions is added. Certificate is updated due to changes in the format of certificate for reference materials.
16.12.2025	Certificate is updated due to corporate identity (logo) change of TÜBİTAK UME.