

<b>STN</b>	<b>Kvapalné ropné výrobky Stanovenie obsahu síry v automobilovom etanolovom palive E85 Metóda vlnodĺžkovou disperznou röntgenovou fluorescenčnou spektrometriou</b>	<b>STN EN 16997</b>  65 6580
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Liquid petroleum products - Determination of the sulfur content in Ethanol (E85) automotive fuel - Wavelength dispersive X-ray fluorescence spectrometric method

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/25

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EUROPEAN STANDARD

EN 16997

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

## Liquid petroleum products - Determination of the sulfur content in Ethanol (E85) automotive fuel - Wavelength dispersive X-ray fluorescence spectrometric method

Produits pétroliers liquides - Détermination de la teneur en soufre dans le carburant éthanol (E85) pour automobiles - Méthode spectrométrique par fluorescence de rayons X dispersive en longueur d'onde

Flüssige Mineralölerzeugnisse - Bestimmung des Schwefelgehalts in Ethanolkraftstoff (E85) - Wellenlängendispersives Röntgenfluoreszenz-Spektrometrie-Verfahren

This European Standard was approved by CEN on 9 June 2025.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**EN 16997:2025 (E)**

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## European foreword

This document (EN 16997:2025) has been prepared by Technical Committee CEN/TC 19 “Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2026, and conflicting national standards shall be withdrawn at the latest by January 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 16997:2017.

This second edition includes the following significant changes compared with the previous edition EN 16997:2017:

- addition of Clause 3 “Terms and definitions” and renumbering of the other clauses accordingly;
- correction of Formula (3) in 10.3.1.

The methodology described in this document is based on EN ISO 20884 [1] and EN 15485 [2].

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## EN 16997:2025 (E)

### 1 Scope

This document specifies a wavelength-dispersive X-ray fluorescence (WDXRF) test method for the determination of the sulfur content in ethanol (E85) automotive fuel [3], containing ethanol between 50 % (V/V) and 85 % (V/V), from 5 mg/kg to 20 mg/kg, using instruments with either monochromatic or polychromatic excitation.

NOTE 1 Sulfur contents higher than 20 mg/kg can be determined after sample dilution with an appropriate solvent. However, the precision was not established for diluted samples.

NOTE 2 For the purposes of this document, the terms “% (m/m)” and “% (V/V)” are used to represent the mass fraction ( $\mu$ ) and the volume fraction ( $\varphi$ ) of a material respectively.

**WARNING** — The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3170, *Petroleum liquids — Manual sampling (ISO 3170)*

EN ISO 3171, *Petroleum liquids — Automatic pipeline sampling (ISO 3171)*

EN ISO 22854, *Liquid petroleum products — Determination of hydrocarbon types and oxygenates in automotive-motor gasoline and in ethanol (E85) automotive fuel — Multidimensional gas chromatography method (ISO 22854)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**