

<b>STN</b>	<b>Automobilové palivá. Stanovenie vysokovrúcich zložiek, vrátane metylesterov mastných kyselín, v automobilovom benzíne a automobilovom palive etanol E85. Metóda plynovej chromatografie.</b>	<b>STN EN 16270</b>  65 6585
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Automotive fuels - Determination of high-boiling components including fatty acid methyl esters in petrol and ethanol (E85) automotive fuel - Gas chromatographic 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. 09/15

Obsahuje: EN 16270:2015

Oznámením tejto normy sa ruší  
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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2015  
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

English Version

**Automotive fuels - Determination of high-boiling components  
including fatty acid methyl esters in petrol and ethanol (E85)  
automotive fuel - Gas chromatographic method**

Carburants pour automobiles - Détermination des composés à haut point d'ébullition dont les esters méthyliques d'acides gras dans l'essence et dans le carburant éthanol pour automobiles (E85) - Méthode par chromatographie en phase gazeuse

Kraftstoffe für Kraftfahrzeuge - Bestimmung von hochsiedenden Komponenten inklusive Fettsäure-Methylester in Ottokraftstoff und Ethanol (E85)-Kraftstoff für Fahrzeuge - Gaschromatographisches Verfahren

This European Standard was approved by CEN on 30 April 2015.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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## **Foreword**

This document (EN 16270:2015) 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 December 2015, and conflicting national standards shall be withdrawn at the latest by December 2015.

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

This document supersedes EN 16270:2012.

Its scope has been extended to ethanol (E85) automotive fuel, the precision data have been updated and further technical improvements have been included.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies a determination method of high boiling components in petrol according to EN 228 [1] and ethanol (E85) automotive fuels according to CEN/TS 15293 [2] by capillary gas chromatography using flame ionization detection. This method is applicable to high boiling material, such as fatty acid methyl ester (FAME) or diesel fuel, having a boiling point greater than or equal to 1-methylnaphthalene.

This European Standard is applicable to materials having a vapour pressure low enough to permit sampling at ambient temperature and covers a boiling range of at least 100 °C. This method pays special attention to fatty acid methyl esters.

In petrol the measurement range for the high boiling fraction is from about 0,7 % (m/m) to about 2,5 % (m/m). For the FAME fraction the range is from about 0,2 % (m/m) to about 2 % (m/m).

In ethanol (E85) automotive fuel the measurement range for the high boiling fraction is from about 0,2 % (m/m) to about 2,2 % (m/m), for the FAME fraction the range is from about 0,05 % (m/m) to about 1,5 % (m/m)

NOTE 1 When calculating the FAME fraction, this method only takes the C18 FAME compounds into account.

NOTE 2 For the purposes of this European Standard, the terms “% (m/m)” and “% (V/V)” are used to represent respectively the mass fraction and the volume fraction.

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

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14214, *Liquid petroleum products - Fatty acid methyl esters (FAME) for use in diesel engines and heating applications - Requirements and test methods*

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

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

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