SLOVENSKI STANDARD
SIST EN 16709:2015/oprA1:2017

01-september-2017

Goriva za motorna vozila - Dizelsko gorivo z visoko vsebnostjo FAME (B20 in B30) - Zahteve in preskusne metode

Automotive fuels - High FAME diesel fuel (B20 and B30) - Requirements and test methods

Kraftstoffe für Kraftfahrzeuge - Dieselkraftstoffmischungen mit hohem FAME-Anteil (B20 und B30) - Anforderungen und Prüfverfahren

Carburants pour automobiles - Carburant avec teneur élevée en EMAG (B20 ét B30) - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: **EN 16709:2015/prA1:2017**

ICS:

75.160.20	Tekoča goriva	Liquid fuels

SIST EN 16709:2015/oprA1:2017 **en,fr,de**

EUROPEAN STANDARD

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English Version

Automotive fuels - High FAME diesel fuel (B20 and B30) - Requirements and test methods

Carburants pour automobiles - Carburant avec teneur élevée en EMAG (B20 ét B30) - Exigences et méthodes d'essai

Kraftstoffe für Kraftfahrzeuge - Dieselkraftstoffmischungen mit hohem FAME-Anteil (B20 und B30) - Anforderungen und Prüfverfahren

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 19.

This draft amendment A1, if approved, will modify the European Standard EN 16709:2015. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 16709:2015/prA1:2017) 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 document is currently submitted to the CEN Enquiry.

The following is a list of significant technical changes between this amendment and the previous edition:

— Removal of references to the since 2014 obsolete legal limit of 6 mg/l Mn and alignment of that specific subclause with other fuel specifications;

— Inclusion of two alternative determination techniques for cetane number;

— Revising the wording for the allowance of other (bio)components to be more precise;

— Reference to recently developed CEN Technical Reports on cold filterability issues;

— Adaptation of the water content limit in line with the reporting of the standard;

— Updates towards other revised test method standards in general;

— Inclusion of reference to EN 16942 regarding pump marking in line with the requirements set by the new Directive 2014/94/EU [12].

1 Modification to the European foreword

Replace the 4th paragraph with the following:

"Requirements following amendment 2003/17/EC [2], 2009/30/EC [3], 2011/63/EU [4] and 2014/77/EU [13] to the European Fuels Quality Directive 98/70/EC [1], are taken into account. The marking at the pump of this product is in line with the requirements of the Fuels Quality Directive and the Alternative Fuels Infrastructure Directive [12].".

2 Modifications to Clause 2, "Normative references"

*Replace in the second reference: "*EN 12916:2006[2)]" by "EN 12916:2016". *Move the footnote [2)] after* EN 12662.

Add the reference 2) to the footnote to the eleventh, thirteenth, fifteenth, sixteenth, twentieth and twenty-first references.

Add the following new references in numbered sequence:

"EN 16715:2015, *Liquid petroleum products - Determination of ignition delay and derived cetane number (DCN) of middle distillate fuels – Ignition delay and combustion delay determination using a constant volume combustion chamber with direct fuel injection*

EN 16906:2017, *Liquid petroleum products - Determination of the ignition quality of diesel fuels - BASF engine method*

EN 16942:2016, *Fuels – Identification of vehicle compatibility – Graphical expression for consumer information".*

*Replace the twelfth reference by "*EN ISO 2719:2016, *Determination of flash point – Pensky-Martens closed cup method (*ISO 2719:2016*)"·*

*Replace the eighteenth reference by "*EN ISO 3924:2016, *Petroleum products – Determination of boiling range distribution – Gas chromatography method (*ISO 3924:2016*)*".

3 Modifications to Clause 5, "Pump marking"

Replace the text in this clause with the following:

*"*Information to be marked on dispensing pumps and nozzles used for delivering high FAME (B20 and B30) diesel fuel, and the dimensions of the mark shall be in accordance with EN 16942.

Where high FAME (B20 – B30) diesel fuel with metallic additives is made available to consumers, the label shall contain: "Contains metallic additives" in the national language(s) and shall be laid down in the National Annex to this document.".

4 Modification to 6.2.2, "Methylcyclopentadienyl Manganese Tricarbonyl (MMT)"

Replace the text in this clause with the following:

*"*When methylcyclopentadienyl manganese tricarbonyl (MMT) is used, a specific labelling is required (see also Clause 5). The presence of the MMT is limited via a manganese content limit as in Tables 1 and 2.

5 Modification to 6.3, "Fatty acid methyl ester (FAME)"

In the 1st paragraph, delete the phrase at the end: "in which case the climate-dependent requirements set out in EN 14214:2012+A1:2014, 5.4.2 do not apply".

Add at the end in line with other blends specifications:

"In order to improve the oxidation stability of FAME, it is strongly recommended to add oxidation stability enhancing additives to FAME at the production stage and before storage, providing an oxidation stability similar to that obtained with 1 000 mg/kg of 2,6-di-tert-butyl-4-hydroxytoluene (BHT, officially designated by IUPAC as 2,6-bis(1,1-dimethylethyl)-4-methylphenol).

The similar action may be read as providing oxidation stability performance at least equal to that obtained with 1 000 mg/kg of BHT.

CAUTION — There is a potential risk of precipitate formation with oxidation stability enhancing additives at low temperatures in low aromatic arctic fuel. Caution should therefore be taken in the choice of oxidation stability enhancing additives to arctic grade FAME.".

6 Modification to 6.4, "Other (bio-) components"

Delete the 2nd paragraph and the NOTE.

Add at the end: "The co-processing of renewable[3)] feedstock at refineries is also allowed provided that the final fuel meets the requirements of this European Standard".

Add a new footnote 3) that reads: "For clarification of renewable see Directive 2009/28/EC [6] and 2015/1513/EC [7]"

7 Modifications to Table 1, "Generally applicable requirements and test methods for high FAME (B20) fuel" in 6.5.2

In the 2nd row (cetane number), fifth column, add: "EN 16715" *and* "EN 16906" *below* "EN 16144".

In the 10th row (water content), in the second column replace "mg/kg" *with* "% (*m/m*)" *and in the fourth column replace* "260" *with* "0,026".

In the last row (distillation), 4th column, in the last line replace "360" *with* "360,0".

Replace the text in footnote d with the following:

"The maximum limit in the Fuels Quality Directive [1, 2, 3, 4 and 13] for diesel type fuels is 845,0 kg/m^3.".

Delete footnote h and any references to it in Table 1.

8 Modifications to Table 2, "Generally applicable requirements and test methods for high FAME (B30) fuel" in 6.5.2

In the 2nd row (cetane number), fifth column, add: "EN 16715" and "EN 16906" below EN 16144.

In the 10th row (water content), in the second column replace "mg/kg" *with* "% (*m/m*)" *and in the fourth column replace* "290" *with* "0,029".

In the last row (distillation), 4th column, in the last line replace "360" with "360,0".

Replace the text in footnote d with the following:

"The maximum limit in the Fuels Quality Directive [1, 2, 3, 4 and 13] for diesel type fuels is 845,0 kg/m^3.".

Delete footnote h and any references to it in Table 2.

9 Modification to 6.6, "Climate dependent requirements and related test methods"

In 6.6.1 replace the current NOTE with the following:

"NOTE Attention is drawn to CEN/TR 16884 [10] on cold operability testing and fuel performance correlation. In addition, CEN has developed CEN/TR 16982 [14] on cold filterability issues that have been reported in some geographical areas at low temperatures above the cloud point of the fuel. Work to improve understanding of these issues and develop technical solutions is on-going within CEN and some national standardisation bodies.".

10 Modifications to Table 4, " Climate-related requirements and test methods — Arctic or severe winter climates" in 6.7.6

*In the 5th and 6th row, last column, add: "*EN 16715*" and "*EN 16906*" below* EN 16144*.*

Replace the text in footnote e with the following:

"In countries where the European Fuels Directive 98/70 EC [1] including amendments 2003/17/EC [2], 2009/30/EC [3] and 2011/63/EU [4] and 2014/77/EU [13], applies.".

Replace the text in footnote f with the following:

"In countries where the European Fuels Directive 98/70 EC [1] including amendments 2003/17/EC [2], 2009/30/EC [3], 2011/63/EU [4] and 2014/77/EU [13], does not apply.".

11 Modifications to the Bibliography

Update bibliographic reference number [7] to read: "EN 15940, *Automotive fuels - Paraffinic diesel fuel from synthesis or hydrotreatment - Requirements and test methods*".

Add the following new bibliographic references:

"[12] *Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure*

[13] *Commission Directive 2014/77/EU of 10 June 2014 amending Annexes I and II of Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels*

[14] CEN/TR 16982, *Diesel blends - Cold filterability issues*".