

SLOVENSKI STANDARD SIST EN 590:2013/kFprA1:2016

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Goriva za motorna vozila - Dizelsko gorivo - Zahteve in preskusne metode

Automotive fuels - Diesel - Requirements and test methods

Kraftstoffe für Kraftfahrzeuge - Dieselkraftstoff - Anforderungen und Prüfverfahren

Carburants pour automobiles - Carburants pour moteur diesel (gazole) - Exigences et méthodes d'essai

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Liquid fuels

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Automotive fuels - Diesel - Requirements and test methods

Carburants pour automobiles - Carburants pour moteur diesel (gazole) - Exigences et méthodes d'essai Kraftstoffe für Kraftfahrzeuge - Dieselkraftstoff -Anforderungen und Prüfverfahren

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

This draft amendment A1, if approved, will modify the European Standard EN 590:2013. 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.

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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

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EN 590:2013/FprA1:2016 (E)

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European foreword

This document (EN 590:2013/FprA1:2016) 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 Unique Acceptance Procedure.

This document was originally prepared under a mandate given to CEN by the European Commission and the European Free Trade Association [5]. In addition to other standards, it is intended to be complementary to the regulatory measures contained in various EU Directives.

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

- Requirements following amendment 2014/77/EU [12] are taken into account;
- Removal of references to the since 2014 obsolete legal limit of 6 mg/l MMT and alignment of that specific subclause with other fuel specifications;
- Inclusion of a revised version of EN 12662 and the revised FAME specification EN 14214:2012+A1:2014;
- Precising the wording for the allowance of other (bio)components;
- Reference to recently developed CEN Technical Reports on cold operability testing and on cold filterability issues;
- Inclusion of EN 16715 as a third possible derived cetane number (DCN) test;
- Adaptation of the lubricity requirement, as following the recent revision to the HFRR test method it is no longer appropriate to refer to the "corrected wear scar diameter (wsd 1.4) at 60°C" because the humidity correction factor has been eliminated;
- Updates towards other revised test method standards in general;
- Inclusion of reference to the work of CEN/TC 441 regarding pump marking in line with the requirements set by the new Directive 2014/94/EU [11].

1 Modifications to the Foreword

6th paragraph, first listed item, first sentence shall read: "Requirements following amendment 2003/17/EC [2], 2009/30/EC [3], 2011/63/EU [4] and 2014/77/EU [12] to the European Fuels Quality Directive 98/70/EC [1], are taken into account".

6th paragraph, sixth listed item, second line shall start with: "including its Amendments [2] [3] [4] [12],".

At the end of the 6th paragraph, introduce the following sentence: "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 [11]."

2 Modifications to Clause 2, Normative references

Replace the first reference by: "EN 116:2015, Diesel and domestic heating fuels - Determination of cold filter plugging point - Stepwise cooling bath method".

Replace the second reference by: "EN 12662:2014, Liquid petroleum products — Determination of total contamination in middle distillates, diesel fuels and fatty acid methyl esters".

Replace in the third reference: "EN 12916:2006¹)" by "EN 12916:2015".

Replace in the fourth reference: "EN 14078:2009¹)" by "EN 14078:2014".

Replace in the fifth reference: "EN 14214:2012³)" by "EN 14214:2012+A1:2014" and delete the footnote 3).

Replace in the sixth reference: "EN 15195:2007¹)" by "EN 15195:2014".

Replace in the seventh reference: "EN 15751:2009¹)" by "EN 15751:2014".

Replace the tenth reference by: "EN 16576:2014, Automotive fuels - Determination of manganese and iron content in diesel - Inductively coupled plasma optical emission spectrometry (ICP OES) method"

Include new reference in numbered sequence: "EN 16715, 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".

Include new reference in numbered sequence: "prEN 16942:2016, *Fuels – Identification of vehicle compatibility – Graphical expression for consumer information*"

Replace the thirteenth reference by "EN ISO 2719:2016¹), Determination of flash point --Pensky-Martens closed cup method (ISO 2719:2016)".

Replace in *the fourteenth reference* "EN ISO 3104:1996" *by* "EN ISO 3104:1996¹)"

Replace in the seventeenth reference "EN ISO 3405:2011" by "EN ISO 3405:20111)"

Replace the nineteenth reference by "EN ISO 3924:2016²), Petroleum products --Determination of boiling range distribution -- Gas chromatography method (ISO 3924:2016)" and move footnote 1) to page 5.

Replace in *the fourteenth reference* "EN ISO 4259:2006" by "EN ISO 4259:20061)"

Replace in the fifteenth reference: "EN ISO 4264:2007⁴)" by "EN ISO 4264:2007/A1:2013", and delete the footnote 4).

Replace the twenty-fifth reference by: "EN ISO 12156-1:2015, Diesel fuel - Assessment of lubricity using the high-frequency reciprocating rig (HFRR) – Part 1: Test method (ISO 12156-1:2015)"

3 Modifications to Clause 4, Pump marking

Rewrite the 1st *paragraph:* "Information to be marked on dispensing pumps and nozzles used for delivering automotive diesel fuel, and the dimensions of the mark shall be in accordance with prEN 16942.

4 Modification to 5.2.2, Methylcyclopentadienyl Manganese Tricarbonyl (MMT)

*Rewrite the whole subclause including the NOTE: "*MMT is a metallic additive that can be used in automotive fuels, but whose presence is limited since 1 January 2011 (see [4]). When MMT is used, a specific labelling is required (see also Clause 4)."

5 Modification to 5.3 Fatty acid methyl ester (FAME)

 1^{st} paragraph above the NOTE 1 replace with "Diesel fuel may contain up to 7,0 % (*V*/*V*) of FAME complying with EN 14214:2012+A1:2014, in which case the climate dependent requirements set out in 5.4.2 of EN 14214:2012+A1:2014 do not apply".

6 Modification to 5.4 Other (bio-) components

Replace the whole sub-clause including the NOTE by: "Limits for FAME do not apply to other (non-petroleum derived) hydrocarbons, such as Hydrotreated Vegetable Oil (HVO), Gas To Liquid (GTL) or Biomass To Liquid (BTL) derived hydrocarbons, since these paraffinic diesel components are allowed in any proportions provided that the final blend complies with the requirements of this European Standard. The co-processing of renewable feedstock at refineries is also allowed provided that the final fuel meets the requirements of this European Standard".

7 Modifications to Table 1

2nd row, fifth column, add: "EN 16715" below EN 16144

7th row, first column, delete the two indications: "until 2013-12-31" and "from 2014-01-01".

7th row, third and fourth column, delete the limits: "-" respectively "6,0", and re-align the remaining limits.

7th row, last column, delete: prEN 16576 and replace with "EN 16576".

16th row, first column, delete: "Lubricity, corrected wear scar diameter (wsd 1,4) at 60 °C" and replace with: "Lubricity, wear scar diameter (WSD) at 60 °C"

Rewrite the NOTE: "Requirements in bold refer to the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3], [4] and [12]"

8 Addition to 5.6 Climate dependent requirements and related test methods

After 1st *paragraph, insert NOTE before Table 2:* "NOTE Attention is drawn to CEN/TR 16884^[13] on cold operability testing and fuel performance correlation. In addition, CEN has developed another technical report on cold filterability issues^[14] 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."

9 Modifications to Table 3

Rewrite the footnote e: "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 [12] applies."

Rewrite the footnote f: 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 [12] does not apply.

10 Modifications to the Bibliography

Remove bibliographic reference number [7] and renumber the other ones in the Bibliography and throughout the document.

Add the following bibliographic reference: [11] Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure

Add the following bibliographic reference: "[12] 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"

Add the following bibliographic reference: "[13] CEN/TR 16884, Automotive fuels — Diesel fuel — Cold operability testing and fuel performance correlation"

Add the following bibliographic reference: "[14] CEN/TR 16982, *Diesel blends - Cold filterability issues*"