



SLOVENSKI STANDARD
SIST EN 228:2012/kFprA1:2017
01-januar-2017

Goriva za motorna vozila - Neosvinčeni motorni bencini - Zahteve in preskusne metode

Automotive fuels - Unleaded petrol - Requirements and test methods

Kraftstoffe für Kraftfahrzeuge - Unverbleite Ottokraftstoffe - Anforderungen und Prüfverfahren

Carburants pour automobiles - Essence sans plomb - Exigences et méthodes d'essai

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75.160.20 Tekoča goriva Liquid fuels

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Automotive fuels - Unleaded petrol - Requirements and test methods

Carburants pour automobiles - Essence sans plomb -
Exigences et méthodes d'essai

Kraftstoffe für Kraftfahrzeuge - Unverbleite
Ottokraftstoffe - 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 228:2012. 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

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European foreword

This document (EN 228:2012/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 the Unique Acceptance Procedure.

This document was originally prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. 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 actual European Standard, EN 228:2012:

- New requirements following amendment 2014/77/EU [11] are taken into account.
- Reference to the revised ethanol specification EN 15376.
- Update of newer test method standards.
- Removal of references to the since 2014 obsolete legal limit of 6 mg/l MMT.
- Inclusion of a section on unwanted blending components
- Inclusion of a section on synthetic hydrocarbons (wording similar to EN 590).
- 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[12].

EN 228:2012/FprA1:2016**1 Modifications to the Foreword**

6th paragraph, first listed item, first sentence shall read: "New requirements following amendment 2009/30/EC [3], 2011/63/EU [4] and 2014/77/EU [11] 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] [11],".

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 [12]."

2 Modifications to Clause 1, Scope

NOTE 1 to be updated: "The two types are based on European Directive requirements [3] [4] [11]."

3 Modifications to Clause 2, Normative references

Replace the third reference by: "EN 1601:2014, Liquid petroleum products — Unleaded petrol — Determination of organic oxygenate compounds and total organically bound oxygen content by gas chromatography (O-FID)"

Replace the fifth reference by: EN 13016-1:2007¹⁾, Liquid petroleum products — Vapour pressure — Part 1: Determination of air saturated vapour pressure (ASVP) and calculated dry vapour pressure equivalent (DVPE)

Replace the seventh reference by: "EN 14275:2013 , Automotive fuels — Assessment of petrol and diesel fuel quality — Sampling from retail site pumps and commercial site fuel dispensers"

Replace the eighth reference by: "EN 15376:2014, Automotive fuels — Ethanol as a blending component for petrol — Requirements and test methods"

Replace the eleventh reference by: "EN 16136:2014, Automotive fuels - Determination of manganese and iron content in unleaded petrol - Inductively coupled plasma optical emission spectrometry (ICP OES) method"

Replace the fifteenth reference by: "EN ISO 3405:2011¹⁾, Petroleum products — Determination of distillation characteristics at atmospheric pressure (ISO 3405:2011)"

Replace the seventeenth reference by: "EN ISO 4259:2006¹⁾, Petroleum products — Determination and application of precision data in relation to methods of test (ISO 4259:2006)"

Replace the eighteenth reference by: "EN ISO 5163:2014, Petroleum products — Determination of knock characteristics of motor and aviation fuels — Motor method (ISO 5163:2014)"

Replace the nineteenth reference by: "EN ISO 5164:2014, Petroleum products — Determination of knock characteristics of motor fuels — Research method (ISO 5164:2014)"

Replace the twenty-second reference by: "EN ISO 12185:2016¹⁾, Crude petroleum and petroleum products — Determination of density — Oscillating U-tube method (ISO 12185:1996)"

Replace the last reference by: "EN ISO 22854:2014, Liquid petroleum products - Determination of hydrocarbon types and oxygenates in automotive-motor gasoline and in ethanol (E85) automotive fuel - Multidimensional gas chromatography method (ISO 22854:2014)"

Include the following additional reference: "prEN 16942:2016, Fuels – Identification of vehicle compatibility – Graphical expression for consumer information"

4 Modifications to Clause 4, Pump marking

The first paragraph shall read as follows: "Information to be marked on dispensing pumps and nozzles used for delivering unleaded petrol, and the dimensions of the label shall be in accordance with prEN 16942."

The second paragraph shall be retained

The rest of this clause shall be deleted and replaced with "It is also recommended that additional pump marking be applied to specify the RON supplied".

5 Modification to 5.1, Ethanol

Rephrase the title of 5.1 : "Bio-components"

Include before the actual text of 5.1 a sub-clause 5.1.1: "Ethanol"

Include the following before the actual sub-clause 5.2:

5.1.2 Other (bio-) components

Limits for adding ethanol and other oxygenates as listed in Table 1 and Table 2 are set for technical reasons. Limits do not apply to other hydrocarbons and other renewable²⁾ hydrocarbons, since these components are allowed in any proportions provided that the final blend complies with the requirements of EN 228. The use of renewable feedstock at refineries is also allowed provided that the final fuel meets the requirements of EN 228.

Include a new footnote 2): "For clarification of renewable see [13]"

6 Inclusion of a new sub-clause 5.2

Include before the actual text of 5.2 a new sub-clause and re-number all following sub-clauses under 5:

5.2 Blending components

Blending components shall consist solely of hydrocarbons. The only non-hydrocarbon components permitted, with their maximum content, are listed in Table 1 and Table 2. The use of any other chemical compounds is NOT permitted.

NOTE For this purpose, blending components are components used at concentrations higher than 0,25 % m/m.

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7 Modification to 5.3.1

Delete the CAUTION in sub-clause 5.3.1.

8 Modification to 5.3.3, Methylcyclopentadienyl Manganese Tricarbonyl (MMT)

Delete the last two sentences from this sub-clause, namely: "The presence of the MMT in unleaded petrol shall be limited to 6 mg of manganese per litre from 1 January 2011. The limit shall be 2 mg of manganese per litre from 1 January 2014."

Delete the NOTE in this sub-clause.

9 Modification to 5.4, introduction of a general workmanship sentence

Introduce under 5.4 before the NOTE: "Unleaded petrol shall be free from any adulterant or contaminant that may render the fuel unacceptable for use in petrol engine vehicles designed to run on unleaded petrol."

10 Modifications to Table 1 under 5.4

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.

12th row, first column, remove the reference to table footnote f and re-name references g to k in the whole Table.

Rewrite the NOTE: "Requirements in bold refer to the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3], [4] and [11]"

Rewrite the first sentence of the footnote b): "A correction of 0,2 for MON and RON shall be subtracted for the calculation of the final result, before reporting according to the requirement of the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3], [4] and [11]"

Remove table footnote f and re-name all the following ones

11 Modifications to Table 2 under 5.4

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.

Rewrite the NOTE: "Requirements in bold refer to the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3], [4] and [11]"

Rewrite the first sentence of the footnote b): "A correction of 0,2 for MON and RON shall be subtracted for the calculation of the final result, before reporting according to the requirement of the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3], [4] and [11]"