



SLOVENSKI STANDARD

oSIST prEN 15491:2021

01-april-2021

Etanol kot komponenta za dodajanje motornemu bencinu - Določevanje celotne kislosti - Titracijska metoda z barvnim indikatorjem

Ethanol as a blending component for petrol - Determination of total acidity - Colour indicator titration method

Ethanol zur Verwendung als Blendkomponente in Ottokraftstoff - Bestimmung der Gesamtsäurezahl - Farbindikator-Titration

Ethanol comme base de mélange à l'essence - Détermination de l'acidité totale - Méthode de titrage par indicateur coloré

Ta slovenski standard je istoveten z: prEN 15491

[SIST EN 15491:2022](https://standards.slovenski-institut.si/standards/sist-en-15491-2022)

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ICS:

71.080.60	Alkoholi. Etri	Alcohols. Ethers
75.160.20	Tekoča goriva	Liquid fuels

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EUROPEAN STANDARD
NORME EUROPÉENNE
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ICS 75.160.20; 71.080.60

Will supersede EN 15491:2007

English Version

Ethanol as a blending component for petrol - Determination of total acidity - Colour indicator titration method

Ethanol comme base de mélange à l'essence -
Détermination de l'acidité totale - Méthode de titrage
par indicateur coloré

Ethanol zur Verwendung als Blendkomponente in
Ottokraftstoff - Bestimmung der Gesamtsäurezahl -
Farbindikator-Titration

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

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard 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 (prEN 15491:2021) 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.

This document will supersede EN 15491:2007. It was originally prepared by CEN/TC 19’s Ethanol Task Force and is based on the Energy Institute standard IP 538 [1].

In comparison with the previous edition, the following technical modification has been made:

- the purging step (8.4) has been made mandatory for clarification to the user and for better comparison of the results. This has no effect on the method precision.

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1 Scope

This document specifies a method for determining the total acidity, calculated as acetic acid, of ethanol to be used in petrol blends. It is applicable to ethanol having total acid contents of between 0,003 % (m/m) and 0,015 % (m/m).

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

WARNING — 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 take appropriate measures to ensure the safety and health of personnel prior to the application of the document, and to fulfil statutory and regulatory restrictions for this purpose.

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 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

total acidity

acidity, calculated as acetic acid, determined by titration and colour indicator as given in this document

4 Principle

A test portion of the ethanol is mixed with an equal volume of neutralized, carbon dioxide free water. The acid content is titrated with potassium hydroxide solution, to the neutral end point of phenolphthalein. The total acidity is then calculated as acetic acid.