SLOVENSKI STANDARD
SIST EN 15491:2025

01-maj-2025

Nadomešča:
SIST EN 15491:2022

Etanol kot komponenta za dodajanje motornemu bencinu - Določanje 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: **EN 15491:2025**

ICS:

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

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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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 European Standard was approved by CEN on 15 January 2025.

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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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 15491:2025) 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of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

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

This document supersedes EN 15491:2021.

In comparison with the previous edition EN 15491:2021, the following technical modification has been made:

— sparging with nitrogen before titration has been added to 8.4 and sparging during the titration has been made mandatory for clarification to the user and for better comparison of the results. This has no effect on the method precision.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

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 terms "% (*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 terminology databases for use in standardization at the following addresses:

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

— IEC Electropedia: available at https://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.