

Ethanol as a blending component for petrol -
Determination of dry residue (involatile material) -
Gravimetric method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15691:2023 sisaldab Euroopa standardi EN 15691:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 15691:2023 consists of the English text of the European standard EN 15691:2023.
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English Version

Ethanol as a blending component for petrol -
Determination of dry residue (involatile material) -
Gravimetric method

Éthanol comme base de mélange à l'essence -
Détermination du résidu sec (produits non volatils) -
Méthode gravimétrique

Ethanol zur Verwendung als Blendkomponente in
Ottokraftstoff - Bestimmung des Trockenrückstandes
(nichtflüchtige Bestandteile) - Gravimetrisches
Verfahren

This European Standard was approved by CEN on 7 May 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	4
5 Apparatus	4
6 Sampling	5
6.1 Preparation of samples.....	5
6.2 Verification and quality control.....	5
7 Procedure	5
8 Calculation	5
9 Expression of results	5
10 Precision	6
10.1 General.....	6
10.2 Repeatability, r	6
10.3 Reproducibility, R	6
11 Test report	6
Bibliography	7

European foreword

This document (EN 15691:2023) 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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

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 15691:2009.

It was originally prepared by CEN/TC 19’s Ethanol Task Force based on a regulated analysis method for neutral alcohol [1].

In comparison with the previous edition EN 15691:2009, based on a re-evaluation of the interlaboratory study the precision statement (Clause 10) has been replaced by the recalculated version. Following the same re-evaluation the scope of the method (Clause 1) has not been extended.

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.

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1 Scope

This document specifies a procedure for the determination of dry residue in ethanol by gravimetric (desiccation) method in the range (10 to 25) mg/100 ml.

NOTE In an interlaboratory study [2] the method described has been tested at levels down to 3,5 mg/100 ml, but the precision appeared to be insufficient at such low levels.

WARNING — Use of this document can involve hazardous equipment, materials and operations. This method does not purport to address to 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)*

3 Terms and definitions

No terms and definitions are listed in this document.

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/>

4 Principle

Dry residue is determined by the weighing of the residue left by evaporation of alcohol on a boiling water bath and drying in a drying oven.

Dry residue includes all matter that is non-volatile under specified physical conditions.

5 Apparatus

5.1 Evaporating dish (100 ml to 250 ml).

5.2 Boiling water bath.

5.3 Pipette, 100 ml, class A.

5.4 Oven, capable of being held at a temperature of $(103 \pm 2) ^\circ\text{C}$.

5.5 Desiccator, containing freshly activated silica gel (or equivalent desiccant) with moisture content indicator.

5.6 Analytical balance, capable of weighing to the nearest 0,1 mg.