

**Naftasaadused.
Oksüdatsioonistabiilsuse määramine
bensiinides. Induktsiooniperioodi
meetod**

Petroleum products - Determination of oxidation
stability of gasoline - Induction period method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 7536:2000 sisaldab Euroopa standardi EN ISO 7536:1996 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 7536:2000 consists of the English text of the European standard EN ISO 7536:1996.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Käesolev standard esitab stabiilsuse määramise meetodi kiirendatud oksüdatsiooni tingimustes lennuki- ja autobensiini (ainult lõpptöödeldud kujul) murdumispunkti induktsiooniperioodi mõõtmise teel surveanumseadmes.</p>	<p>Scope:</p>
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ICS 75.160.20

Võtmesõnad: bensiin, määramine, naftasaadused, oksüdatsioon, oksüdatsioonikatsed, püsivus, testimine

ICS 75.160.20

Descriptors: Gasoline, oxidation stability, petroleum products, testing.

English version

Petroleum products

Determination of oxidation stability of gasoline
Induction period method
(ISO 7536:1994)

Produits pétroliers; détermination de la
stabilité à l'oxydation de l'essence;
méthode de la période d'induction
(ISO 7536:1994)

Mineralölerzeugnisse; Bestimmung der
Oxidationsbeständigkeit von Ottokraft-
stoffen; Induktionsdauerverfahren
(ISO 7536:1994)

This European Standard was approved by CEN on 1996-01-18 and is identical to the ISO Standard as referred to.

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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 7536:1994 Petroleum products; determination of oxidation stability of gasoline; induction period method, which was prepared by ISO/TC 28 'Petroleum products and lubricants' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 19 'Petroleum products, lubricants and related products' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by August 1996 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 7536:1994 was approved by CEN as a European Standard without any modification.

WARNING — The use of this International Standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

1.1 This International Standard specifies a method for the determination of the stability of aviation and motor gasolines in their finished form only, under accelerated oxidation conditions, by measuring the induction period to breakpoint in a pressure bomb apparatus.

1.2 The method¹⁾ is not intended for the determination of the stability of gasoline components individually, particularly those with a high percentage of low-boiling unsaturated compounds, as they may cause explosive conditions within the apparatus. However, because of the unknown nature of certain samples, the specified bomb assembly includes a safety burst-disc in order to safeguard the operator.

1.3 The induction period may be used as an indication of the tendency of gasoline to form gum in storage. It should be recognized, however, that this correlation may vary markedly under different storage conditions and with different gasolines.

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1 breakpoint: Point in the pressure–time curve that is preceded by a pressure drop of exactly 14 kPa within 15 min and succeeded by a drop of not less than 14 kPa in 15 min.

2.2 induction period: Time elapsed between the placing of the bomb in the bath and the breakpoint at 100 °C.

3 Principle

The sample is oxidized in a pressure bomb initially filled at 15 °C to 25 °C with oxygen at 690 kPa and heated at a temperature between 98 °C and 102 °C. The pressure is read at stated intervals or recorded continuously until the breakpoint is reached. The time required for the sample to reach this point is the observed induction period at the temperature of test, from which the induction period at 100 °C may be calculated.

WARNING — To provide protection against the possible explosive rupture of the bomb, the bomb should be operated behind an appropriate safety shield.

4 Reagents and materials

4.1 Toluene, $C_6H_5CH_3$, 99 % minimum purity.

4.2 Acetone, CH_3COCH_3 , 99 % minimum purity.

1) Further information can be found in the June 1978, January 1979 and June 1986 editions of the Institute of Petroleum Review.