

**Determination of flash/no flash - Closed cup
equilibrium method**

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equilibrium method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN ISO 1516:2002 sisaldab Euroopa standardi EN ISO 1516:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.09.2002 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 1516:2002 consists of the English text of the European standard EN ISO 1516:2002.</p> <p>This document is endorsed on 18.09.2002 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>This International Standard specifies a method to determine if paints, varnishes, paint binders, solvents, petroleum or related products, when maintained at a selected equilibrium temperature and under the conditions of the test, give off sufficient flammable vapour to cause ignition on application of an external source of flame applied in a standard manner.</p> | <p>Scope:</p> <p>This International Standard specifies a method to determine if paints, varnishes, paint binders, solvents, petroleum or related products, when maintained at a selected equilibrium temperature and under the conditions of the test, give off sufficient flammable vapour to cause ignition on application of an external source of flame applied in a standard manner.</p> |
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ICS 75.080, 87.040

Võtmesõnad: classifications, crucibles, flammability, flammable materials, flash point, flash point determination, hazards, inflammable solids, lacquers, materials, materials testing, mineral oils, paints, petroleum products, test equipment, testing, tests, varnishes

English version

Determination of flash/no flash

Closed cup equilibrium method
(ISO 1516 : 2002)

Essai de point d'éclair de type passe/
ne passe pas – Méthode à l'équilibre
en vase clos (ISO 1516 : 2002)

Flammpunktbestimmung – Ja/Nein-
Verfahren – Gleichgewichtsverfahren
mit geschlossenem Tiegel
(ISO 1516 : 2002)

This European Standard was approved by CEN on 2002-03-01.

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

The European Standards exist 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 Management Centre has the same status as the official versions.

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

CEN

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

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Foreword

International Standard

ISO 1516 : 2002 Determination of flash/no flash – Closed cup equilibrium 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', the Secretariat of which is held by NEN, 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 September 2002 at the latest.

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

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

Endorsement notice

The text of the International Standard ISO 1516 : 2002 was approved by CEN as a European Standard without any modification.

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Introduction

This International Standard describes one of two closed cup equilibrium methods for carrying out a flash/no flash test for paints, varnishes, petroleum and related products, and it should be read in conjunction with the second equilibrium method, ISO 3680 ([2] in the bibliography), when selecting a method.

The determination of the flash point using the same equipment is described in ISO 1523.

This test method does not determine the flash point of the product under test, but merely its behaviour at the selected equilibrium temperature as may be required to comply with laws or regulations relating to the storage, transport and use of flammable products. For this purpose, it is unnecessary to determine the exact flash point, but it is necessary to determine whether or not flashing occurs at a given temperature. By the procedure specified, differences between test apparatus of various standard designs are minimized by ensuring that the test is carried out only when the product under test and the air/vapour mixture above it in the test vessel are considered to be in temperature equilibrium.

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

1 Scope

This International Standard specifies a method to determine if paints, varnishes, paint binders, solvents, petroleum or related products, when maintained at a selected equilibrium temperature and under the conditions of the test, give off sufficient flammable vapour to cause ignition on application of an external source of flame applied in a standard manner.

This International Standard is not applicable to water-borne paints which may, however, be tested using ISO 3680 ([2] in the bibliography).

The method is suitable for use over the temperature range $-30\text{ }^{\circ}\text{C}$ to $110\text{ }^{\circ}\text{C}$, depending on the use of different apparatus listed in Table 1.

The interpretation of results obtained from solvent mixtures containing halogenated hydrocarbons should be considered with caution, as these mixtures can give anomalous results.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1513:1992, *Paints and varnishes — Examination and preparation of samples for testing*

ISO 1523:2002, *Determination of flash point — Closed cup equilibrium method*

ISO 2719:—¹⁾, *Determination of flash point — Pensky-Martens closed cup method*

ISO 3170:1988, *Petroleum liquids — Manual sampling*

ISO 3171:1988, *Petroleum liquids — Automatic pipeline sampling*

ISO 13736:1997, *Petroleum products and other liquids — Determination of flash point — Abel closed cup method*

ISO 15528:2000, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

1) To be published. (Revision of ISO 2719:1988)