



**SLOVENSKI STANDARD  
SIST EN ISO 11890-1:2007**

**01-oktober-2007**

**BUXca Yý U  
SIST EN ISO 11890-1:2002**

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Paints and varnishes - Determination of volatile organic compound (VOC) content - Part 1: Difference method (ISO 11890-1:2007)

Beschichtungsstoffe - Bestimmung des Gehaltes an flüchtigen organischen Verbindungen (VOC-Gehalt) - Teil 1: Differenzverfahren (ISO 11890-1:2007)

Peintures et vernis - Détermination de la teneur en composés organiques volatils (COV) - Partie 1: Méthode par différence (ISO 11890-1:2007)

**Ta slovenski standard je istoveten z: EN ISO 11890-1:2007**

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**ICS:**

87.040 Barve in laki Paints and varnishes

**SIST EN ISO 11890-1:2007 en,fr,de**

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English Version

Paints and varnishes - Determination of volatile organic compound (VOC) content - Part 1: Difference method (ISO 11890-1:2007)

Peintures et vernis - Détermination de la teneur en composés organiques volatils (COV) - Partie 1: Méthode par différence (ISO 11890-1:2007)

Beschichtungsstoffe - Bestimmung des Gehaltes an flüchtigen organischen Verbindungen (VOC-Gehalt) - Teil 1: Differenzverfahren (ISO 11890-1:2007)

This European Standard was approved by CEN on 30 June 2007.

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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 Management Centre has the same status as the official versions.

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Management Centre: rue de Stassart, 36 B-1050 Brussels

## Foreword

This document (EN ISO 11890-1:2007) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by January 2008, and conflicting national standards shall be withdrawn at the latest by January 2008.

This document supersedes EN ISO 11890-1:2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

### Endorsement notice

The text of ISO 11890-1:2007 has been approved by CEN as EN ISO 11890-1:2007 without any modifications.

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**Paints and varnishes — Determination of  
volatile organic compound (VOC)  
content —**

**Part 1:  
Difference method**

*Peintures et vernis — Détermination de la teneur en composés  
organiques volatils (COV) —  
Partie 1: Méthode par différence*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 11890-1 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 11890-1:2000), which has been technically revised. The main change is that, in order to allow the method to be used for multi-component systems as well as single-component systems, the test portion preparation procedures for the determination of the non-volatile-matter content of each of these two types of system has been included in Subclause 7.4.

ISO 11890 consists of the following parts, under the general title *Paints and varnishes — Determination of volatile organic compound (VOC) content*.

- Part 1: *Difference method*
- Part 2: *Gas-chromatographic method*



# Paints and varnishes — Determination of volatile organic compound (VOC) content —

## Part 1: Difference method

### 1 Scope

This part of ISO 11890 is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products.

It specifies a method for the determination of the volatile organic compound (VOC) content of paints, varnishes and their raw materials. This part may be used where the expected VOC content is greater than 15 % by mass. When the expected VOC content is greater than 0,1 % by mass and less than 15 % by mass, ISO 11890-2 should be employed.

This method assumes that the volatile matter is either water or organic. However, other volatile inorganic compounds can be present and might need to be quantified by another suitable method and allowed for in the calculations.

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### 2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 760, *Determination of water — Karl Fischer method (General method)*

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

ISO 2811-1, *Paints and varnishes — Determination of density — Part 1: Pycnometer method*

ISO 2811-2, *Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method*

ISO 2811-3, *Paints and varnishes — Determination of density — Part 3: Oscillation method*

ISO 2811-4, *Paints and varnishes — Determination of density — Part 4: Pressure cup method*

ISO 3251:2003, *Paints, varnishes and plastics — Determination of non-volatile-matter content*

ISO 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing*

ISO 11890-2, *Paints and varnishes — Determination of volatile organic compound (VOC) content — Part 2: Gas-chromatographic method*

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