



SLOVENSKI STANDARD SIST EN ISO 16000-11:2006

01-maj-2006

BUXca Yý U
SIST ENV 13419-3:2000

BcIfUb^nfU_É%rXY.8c`c Yj Ub^Ya [g]^ \ `Udb] `cf[Ubg_ \ `gdc^b`n[fUXVYb] dfc]nj cXcj `]b`cdfYa YÉJncf Yb^žg\ fUb^j Ub^j ncfWj `]b`df]dfUj UdfYg_i gb] j ncfWj `fGC`% \$\$\$!%&\$\$* Ł

Indoor air - Part 11: Determination of the emission of volatile organic compounds from building products and furnishing - Sampling, storage of samples and preparation of test specimens (ISO 16000-11:2006)

Innenraumluftverunreinigungen - Teil 11: Bestimmung der Emission von flüchtigen organischen Verbindungen aus Bauprodukten und Einrichtungsgegenständen - Probenahme, Lagerung der Proben und Vorbereitung der Prüfstücke (ISO 16000-11:2006)

Air intérieur - Partie 11: Dosage de l'émission de composés organiques volatils de produits de construction et d'objets d'équipement - Échantillonnage, conservation des échantillons et préparation d'échantillons pour essai (ISO 16000-11:2006)

Ta slovenski standard je istoveten z: EN ISO 16000-11:2006

ICS:

13.040.20 Kakovost okoljskega zraka Ambient atmospheres

SIST EN ISO 16000-11:2006

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 16000-11:2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 16000-11

February 2006

ICS 13.040.20

Supersedes ENV 13419-3:1999

English Version

Indoor air - Part 11: Determination of the emission of volatile organic compounds from building products and furnishing - Sampling, storage of samples and preparation of test specimens (ISO 16000-11:2006)

Air intérieur - Partie 11: Dosage de l'émission de composés organiques volatils de produits de construction et d'objets d'équipement - Echantillonnage, conservation des échantillons et préparation d'échantillons pour essai (ISO 16000-11:2006)

Innenraumluftverunreinigungen - Teil 11: Bestimmung der Emission von flüchtigen organischen Verbindungen aus Bauprodukten und Einrichtungsgegenständen - Probenahme, Lagerung der Proben und Vorbereitung der Prüfstücke (ISO 16000-11:2006)

This European Standard was approved by CEN on 16 January 2006.

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.

<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-365010000000/iso-16000-11-2006>

CEN members are the national standards bodies of Austria, Belgium, 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

EN ISO 16000-11:2006 (E)**Foreword**

This document (EN ISO 16000-11:2006) has been prepared by Technical Committee CEN/TC 264 "Air quality", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 146 "Air quality".

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 August 2006, and conflicting national standards shall be withdrawn at the latest by August 2006.

This document supersedes ENV 13419-3:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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.

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

SIST EN ISO 16000-11:2006

<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006>

INTERNATIONAL STANDARD

ISO 16000-11

First edition
2006-02-01

Indoor air —

Part 11:

**Determination of the emission of volatile
organic compounds from building
products and furnishing — Sampling,
storage of samples and preparation of
test specimens**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Air intérieur —

*Partie 11. Dosage de l'émission de composés organiques volatils de
produits de construction et d'objets d'équipement — Échantillonnage,
conservation des échantillons et préparation d'échantillons pour essai*



Reference number
ISO 16000-11:2006(E)

© ISO 2006

ISO 16000-11:2006(E)**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 16000-11:2006

<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006>

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Sampling the product and transport and storage of sample	2
5 Preparation of test specimens	3
Annex A (normative) Solid products — Procedure for sampling and test specimen preparation	4
Annex B (normative) Liquid products — Procedure for sampling and test specimen preparation	7
Annex C (informative) Combined products	10
Bibliography	12

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 16000-11:2006
https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

ISO 16000-11:2006(E)

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 16000-11 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 264, *Air quality*, in collaboration with Technical Committee ISO/TC 146, *Air quality*, Subcommittee SC 6, *Indoor air*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 16000 consists of the following parts, under the general title *Indoor air*:

- *Part 1: General aspects of sampling strategy*
- *Part 2: Sampling strategy for formaldehyde*
- *Part 3: Determination of formaldehyde and other carbonyl compounds — Active sampling method*
- *Part 4: Determination of formaldehyde — Diffusive sampling method*
- *Part 5: Measurement strategy for volatile organic compounds (VOCs)*
- *Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA sorbent, thermal desorption and gas chromatography using MS/FID*
- *Part 7: Sampling strategy for determination of airborne asbestos fibre concentrations*
- *Part 8: Determination of local mean ages of air in buildings for characterizing ventilation conditions*
- *Part 9: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test chamber method*
- *Part 10: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test cell method*
- *Part 11: Determination of the emission of volatile organic compounds from building products and furnishing — Sampling, storage of samples and preparation of test specimens*

The following parts are under preparation:

- *Part 12: Sampling strategy for polycyclic aromatic hydrocarbons (PAHs), polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzo-furans (PCDFs) and polychlorinated biphenyls (PCBs)*

- *Part 13: Determination of total (gas and particle-phase) polychlorinated dioxin-like biphenyls and polychlorinated dibenzo-p-dioxins/dibenzofurans — Collection on sorbent-backed filters with high-resolution gas chromatographic/mass spectrometric analysis*
- *Part 14: Sampling strategy for nitrogen dioxide (NO₂)*
- *Part 15: Measurement of nitrogen dioxide (NO₂)*
- *Part 16: Detection and enumeration of moulds — Sampling of moulds by filtration*
- *Part 17: Detection and enumeration of moulds — Culture-based method*

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 16000-11:2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006>

ISO 16000-11:2006(E)**Introduction**

The determination of volatile organic compounds (VOCs) emitted from building products using emission test chambers in conjunction with the standardised sampling, storage of samples and preparation of test specimens has objectives such as:

- to provide manufacturers, builders, and end users with emission data useful for the evaluation of the impact of building products on the indoor air quality;
- to promote the development of improved products.

The method can in principle be used for most building products used indoors.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 16000-11:2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)
<https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006>

Indoor air —

Part 11:

Determination of the emission of volatile organic compounds from building products and furnishing — Sampling, storage of samples and preparation of test specimens

1 Scope

Studies of the emission of volatile organic compounds from unused building products or furnishing in test chambers or cells require proper handling of the product prior to testing, and during the testing period.

This part of ISO 16000 defines three types of building products or furnishing: solid, liquid and combined. For each type, specifications are given for the sampling procedures, transport conditions, storage, and substrate used that can affect emissions of volatile organic compounds. For individual products, the preparation of a test specimen for each type is prescribed.

NOTE Depending on the non-homogeneity of the product, it can be necessary to make measurements on different test specimens to determine the specific emission rate.

[SIST EN ISO 16000-11:2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

[https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

2 Normative references [335a4e38d16e/sist-en-iso-16000-11-2006](https://standards.iteh.ai/catalog/standards/sist/4c48a364-be7b-40e1-b96a-335a4e38d16e/sist-en-iso-16000-11-2006)

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.

EN 1937, *Test method for hydraulic setting floor smoothing and/or levelling compounds — Standard mixing procedures*

ISO 16000-9, *Indoor air — Part 9: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test chamber method*

ISO 16000-10, *Indoor air — Part 10: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test cell method*

EN 13892-1, *Methods of test for screed materials — Part 1: Sampling, making and curing specimens for test*

ISO 3251:1993, *Paints and varnishes — Determination of non-volatile matter of paints, varnishes and binders for paints and varnishes*

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 3233, *Paints and varnishes — Determination of percentage volume of non-volatile matter by measuring the density of a dried coating*