

SISEÕHK

Osa 17: Hallitusseente avastamine ja loendamine Külvipõhine meetod

Indoor air

Part 17: Detection and enumeration of moulds Culture-based method (ISO 16000-17:2008)

EVS

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-ISO 16000-17:2012 „Siseõhk. Osa 17: Hallitussente avastamine ja loendamine. Külvipõhine meetod“ sisaldab rahvusvahelise standardi ISO 16000-17:2008 „Indoor air - Part 17: Detection and enumeration of moulds - Culture-based method“ ning selle paranduse ISO 16000-17:2008/Cor.1:2009 identset ingliskeelset teksti. Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 1, standardi avaldamist on korraldanud Eesti Standardikeskus. Standard EVS-ISO 16000-17:2012 on jõustunud sellekohase teate avaldamisega EVS Teataja 2012. aasta detsembrikuu numbris. Standard on kättesaadav Eesti Standardikeskusest.	This Estonian Standard EVS-ISO 16000-17:2012 consists of the identical English text of the International Standard ISO 16000-17:2008 „Indoor air - Part 17: Detection and enumeration of moulds - Culture-based method“ including its Corrigendum ISO 16000-17:2008/Cor.1:2009. Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 1, the Estonian standard has been published by the Estonian Centre for Standardisation. This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. The standard is available from the Estonian Centre for Standardisation.
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Käsitlusala

See osa standardist ISO 16000 määratleb meetodi hallitussente avastamiseks ja loendamiseks ISO 16000-18 alusel impaktori abil võetud aspiratsiooniproovides või ISO 16000-16 põhjal filtreerimise teel saadud proovides. See sobib samuti hallituse kasvatamiseks materjali suspensioonist või otse söötmega tassi pinnalt.

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Introduction

Mould is a common name for filamentous fungi from different taxonomic groups [Zygomycetes, Ascomycetes (Ascomycota), Deuteromycetes]. They form a mycelium (hyphae) and spores — namely conidiospores (conidia), sporangiospores or ascospores — by which they become visible macroscopically. Most spores are in the size range 2 µm to 10 µm, some up to 30 µm and a very few up to 100 µm. Spores of some mould genera are small and become airborne very easily (e.g. *Aspergillus*, *Penicillium*) while others are bigger and/or embedded in a slime matrix (*Stachybotrys*, *Fusarium*) and less mobile.

Mould spores are widely distributed in the outdoor environment and, therefore, also occur in varying concentrations indoors. Growth of moulds in indoor environments, however, should be considered a public health problem because epidemiological studies have revealed that dampness and/or mould growth in homes and health impairment of occupants are closely related.

Standardised methods for sampling, detection and enumeration of moulds including standards for sampling strategies are important for comparative assessment of mould problems indoors. Before taking any measurements, a measurement strategy is required.

The procedure specified in this part of ISO 16000 is based on VDI 4253-2 [5] and VDI 4300-10 [6].

EVS

Indoor air —

Part 17:

Detection and enumeration of moulds — Culture-based method

WARNING — The use of this part of ISO 16000 may involve hazardous materials, operations and equipment. This part of ISO 16000 does not purport to address any safety problems associated with its use. It is the responsibility of the user of this part of ISO 16000 to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This part of ISO 16000 specifies a method for the detection and enumeration of moulds by cultivation after sampling by impaction according to ISO 16000-18 or by filtration according to ISO 16000-16. It is also suitable for cultivation of moulds from material suspensions or from direct plating.

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 8199, *Water quality — General guidance on the enumeration of micro-organisms by culture*

ISO 16000-16, *Indoor air — Part 16: Detection and enumeration of moulds — Sampling by filtration*

ISO 16000-18, *Indoor air — Part 18: Detection and enumeration of moulds — Sampling by impaction* ¹⁾

3 Definitions

For the purpose of this part of ISO 16000, the following terms and definitions apply:

3.1

filamentous fungus

fungus growing in the form of filaments of cells known as hyphae

NOTE 1 Hyphae aggregated in bundles are called mycelia.

NOTE 2 The term “filamentous fungi” differentiates fungi with hyphal growth from yeasts.

[ISO 16000-16:2008]

1) To be published.