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STN	**Ochrana ovzdušia Stacionárne zdroje emisií Bioaerosóly a biologické látky Odber vzoriek bioaerosólov a zachytávanie v kvapalinách Impingerová metóda**	**STN EN 17359** 83 4801

Stationary source emissions - Bioaerosols and biological agents - Sampling of bioaerosols and collection in liquids - Impingement method

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Stationary source emissions - Bioaerosols and biological agents - Sampling of bioaerosols and collection in liquids - Impingement method

Émissions de sources fixes - Bioaérosols et agents biologiques - Prélèvement des bioaérosols et collecte dans les liquides - Méthode d'impaction par bullage

Emissionen aus stationären Quellen - Bioaerosole und biologische Agenzien - Probenahme von Bioaerosolen und Abscheidung in Flüssigkeiten - Impinger-Methode

This European Standard was approved by CEN on 5 July 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 17359:2020) has been prepared by Technical Committee CEN/TC 264 “Air quality”, 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of an identical text or by endorsement, at the latest by February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

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1 Scope

This document contains specifications for active sampling of bioaerosols from exhaust air flowing through a defined cross-section of a stack. It defines general principles that have to be taken into account during an isokinetic sampling campaign for bioaerosols by bubbling the exhaust air through a specific impinger designed for emission measurements.

In this document the application with culturable organisms is specified but the same principle might be applicable for non-cultural based methods (e.g. molecular and/or enzyme-based methods).

The impinger is designed to allow a sample volume flow of 1 m^3/h to 1,8 m^3/h, or 16 l/min to 30 l/min, respectively, and has been tested with regard to various microorganisms within broad concentration ranges [1; 2; 3; 4]. [1]

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1040:2005, *Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics - Test method and requirements (phase 1)*

EN 13284-1:2017, *Stationary source emissions - Determination of low range mass concentration of dust - Part 1: Manual gravimetric method*

EN 15259:2007, *Air quality - Measurement of stationary source emissions - Requirements for measurement sections and sites and for the measurement objective, plan and report*

CEN/TS 16115-1, *Ambient air quality - Measurement of bioaerosols - Part 1: Determination of moulds using filter sampling systems and culture-based analyses*

EN ISO 16911-1, *Stationary source emissions - Manual and automatic determination of velocity and volume flow rate in ducts - Part 1: Manual reference method (ISO 16911-1)*

EN ISO 20988:2007, *Air quality - Guidelines for estimating measurement uncertainty (ISO 20988:2007)*

[1] This method is accepted by convention as reference method for determination of total emissions under application of an out stack configuration according to EN 13284-1.