

<b>STN</b>	<b>Vonkajšie ovzdušie</b> <b>Odber vzoriek a analýza peľových zrn a spór</b> <b>vzdušných húb vo vzduchu na účely zberu údajov</b> <b>o alergénoch</b> <b>Objemová metóda podľa Hirsta</b>	<b>STN</b> <b>EN 16868</b>  83 5810
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Ambient air - Sampling and analysis of airborne pollen grains and fungal spores for networks related to allergy - Volumetric Hirst method

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

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English Version

## Ambient air - Sampling and analysis of airborne pollen grains and fungal spores for networks related to allergy - Volumetric Hirst method

Air ambiant - Échantillonnage et analyse des grains de pollen en suspension dans l'air et des spores fongiques pour les réseaux relatifs à l'allergie - Méthode volumétrique de Hirst

Außenluft - Probenahme und Analyse luftgetragener Pollen und Pilzsporen für Allergienetzwerke - Volumetrische Hirst-Methode

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 12 June 2019.

This European Standard was approved by CEN on 8 March 2019.

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<b>Contents</b>	<b>Page</b>
European foreword.....	4
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions .....	6
4 Principle .....	10
5 Sampling.....	10
5.1 Equipment .....	10
5.1.1 Apparatus.....	10
5.1.2 Sampling support .....	14
5.1.3 Installation conditions .....	16
5.2 Operating procedure .....	16
5.2.1 Preparation of the coating medium.....	16
5.2.2 Support preparation .....	17
5.2.3 Changing of the drum.....	18
6 Analysis.....	18
6.1 Equipment .....	18
6.2 Operating procedure .....	19
6.2.1 Support .....	19
6.2.2 Mounting medium.....	19
6.3 Methodology for counting.....	19
6.3.1 Glass slide preparation for microscopy analysis for drum tape.....	19
6.3.2 Optical microscopy .....	21
6.3.3 Identification .....	22
6.3.4 Counting method .....	22
6.3.5 Data recording.....	22
6.3.6 Conversion factor .....	23
7 Performance characteristics for pollen and fungal spores counts .....	24
7.1 General.....	24
7.2 Integrated uncertainty assessment.....	24
7.3 Uncertainty from counting error and counting routine.....	24
7.4 Measurement uncertainty relating to sampling efficiency.....	24
7.5 Measurement uncertainty relating to capture film, adhesive and specimen preparation .....	24
7.6 Measurement uncertainty relating to time discrimination.....	25
7.7 Measurement uncertainty related to the detection limit.....	25
7.8 Measurement uncertainty in relation to the calibration of the flow rate.....	25
7.9 Measurement uncertainty relating to spatial representativity .....	25
8 Quality assurance.....	25
8.1 General.....	25
8.2 Measurement site/trap.....	25
8.2.1 Control.....	25
8.2.2 Characterization of the site and its ambient conditions (passport of sampling site) .....	25

<b>8.2.3</b>	<b>Spatial representativity</b> .....	<b>26</b>
<b>8.3</b>	<b>Analyst</b> .....	<b>26</b>
<b>8.4</b>	<b>Intra- and interlaboratory quality assessments</b> .....	<b>26</b>
<b>8.4.1</b>	<b>General</b> .....	<b>26</b>
<b>8.4.2</b>	<b>Repeatability</b> .....	<b>26</b>
<b>8.4.3</b>	<b>Reproducibility and accuracy</b> .....	<b>26</b>
<b>8.4.4</b>	<b>Sensitivity and specificity</b> .....	<b>27</b>
<b>8.5</b>	<b>Network monitoring management</b> .....	<b>27</b>
<b>Annex A</b>	<b>(informative) Hirst type volumetric trap</b> .....	<b>28</b>
<b>Annex B</b>	<b>(informative) Pictures of impaction support</b> .....	<b>29</b>
<b>Annex C</b>	<b>(informative) Material Safety Data Sheets</b> .....	<b>31</b>
<b>Annex D</b>	<b>(informative) Identification key</b> .....	<b>32</b>
<b>Bibliography</b>	.....	<b>37</b>

**EN 16868:2019 (E)****European foreword**

This document (EN 16868:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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

This document supersedes CEN/TS 16868:2015.

The main changes with respect to the previous edition are listed below:

- a) the title has been changed;
- b) modifications have been made to the Introduction, the Scope and Clauses 3, 4, 5 and 6;
- c) new paragraphs have been added to Clauses 7 and 8;
- d) modifications have been made to all Annexes;
- e) Figures D.2 and D.3 have been modified;
- f) the Bibliography has been readjusted;
- g) editorial changes have been made.

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## **Introduction**

Biological particles (pollen and fungal spores) are present in the air, causing health impacts at various levels. In Europe, a lot of people suffer from pollinosis due to pollen and/or fungal spores (EFA, European Federation of Allergy and Airways Diseases Patients Association, 2017). Pollen grains and fungal spores are considered in some Member States as an air pollutant as well as particles suspended in the air (PM<sub>10,2,5</sub>). In Europe, European Aerobiology Society (EAS) in coordination with International Association for Aerobiology (IAA) manage the methodology of sampling, analysis, quality control, development and information.

Persons and institutions involved in pollen forecasting have a scientific and public health responsibility. A pollen forecast is a guideline for allergen avoidance with a direct influence on pollen allergy sufferers and their behaviour. Pollen allergy sufferers are in need of such information since pollen allergy affects their quality of life and pollen and spores are an abundant, environmental allergen. The health state of pollen allergy sufferers should never be risked due to inadequate forecasts, financial interests or deficient working routines applied in the fundamental work such as pollen data evaluation and all involved processes (maintenance of the device, preparation, evaluation, handling and processing of data).

Further pollen data should be included in therapy (immunotherapy at least for one year) to objectify the benefit of the personal therapy.

For the sampling and analysis of biological particles different methodology and operating procedures are used.

Information on airborne pollen and spore concentration (counts and analyses) plays an important role in aerobiology, as well as in other disciplines and fields of application, such as biodiversity, agriculture, forestry, phytopathology, meteorology, climatology, paleo-ecology/-climatology, forensic science, bioterrorism and health (sensitization and allergy). The method described in this European Standard is aimed for the purposes of networks related to allergy. Besides, it may also be useful for other applications mentioned above.

**EN 16868:2019 (E)****1 Scope**

This document specifies the procedure to sample continuously and to analyse the concentration of airborne pollen grains and fungal spores in ambient air using the volumetric Hirst type sampler [1] [2] [3] (see Annex A) or an even equivalent method assuring comparable data.

This document describes both the sampling and the analysis procedures for the purpose of networks related to allergy. For the other tasks mentioned in the introduction, other specifications may be required.

**2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**