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|------------|---|---|
| <b>STN</b> | <b>Vonkajšie ovzdušie. Odber vzoriek a analýza<br/>peľových zŕn a spór vzdušných húb vo<br/>vzduchuna na účely zberu údajov o alergénoch.<br/>Objemová metóda podľa Hirsta.</b> | <b>STN<br/>P CEN/TS 16868</b><br><br><b>83 5810</b> |
|------------|---|---|

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

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

Táto norma bola označená vo Vestníku ÚNMS SR č. 03/16

Táto predbežná STN je určená na overenie. Pripomienky zasielajte ÚNMS SR najneskôr do novembra 2017.

Obsahuje: CEN/TS 16868:2015

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2016  
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy  
rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

## TECHNICAL SPECIFICATION

**CEN/TS 16868**

## SPÉCIFICATION TECHNIQUE

## TECHNISCHE SPEZIFIKATION

November 2015

ICS 13.040.20

English Version

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

Air ambiant - Échantillonnage et analyse des grains de  
pollen et des spores fongiques aériens pour les réseaux  
aérobiologiques - Méthode volumétrique de Hirst

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

This Technical Specification (CEN/TS) was approved by CEN on 15 September 2015 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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

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## Contents

|  | Page      |
|--|-----------|
| <b>European foreword.....</b>  | <b>3</b>  |
| <b>Introduction .....</b>  | <b>4</b>  |
| <b>1 Scope.....</b>  | <b>5</b>  |
| <b>2 Normative references.....</b>   | <b>5</b>  |
| <b>3 Terms and definitions .....</b>   | <b>5</b>  |
| <b>4 Principle .....</b>   | <b>8</b>  |
| <b>5 Sampling.....</b>   | <b>8</b>  |
| <b>5.1 Equipment .....</b>   | <b>8</b>  |
| <b>5.1.1 Apparatus.....</b>  | <b>8</b>  |
| <b>5.1.2 Scrolling speed of support.....</b>   | <b>11</b> |
| <b>5.1.3 Impaction support .....</b>   | <b>11</b> |
| <b>5.1.4 Wind vane and rain shield .....</b>   | <b>13</b> |
| <b>5.1.5 Complete sampling system.....</b>   | <b>14</b> |
| <b>5.2 Operating procedure .....</b>   | <b>14</b> |
| <b>5.2.1 Preparation of the coating medium [12] .....</b>                                  | <b>14</b> |
| <b>5.2.2 Support preparation .....</b>   | <b>15</b> |
| <b>5.2.3 Changing of the drum.....</b>   | <b>16</b> |
| <b>6 Analysis.....</b>   | <b>16</b> |
| <b>6.1 Equipment required.....</b>   | <b>16</b> |
| <b>6.2 Operating procedure .....</b>   | <b>17</b> |
| <b>6.2.1 Support .....</b>   | <b>17</b> |
| <b>6.2.2 Mounting medium.....</b>  | <b>17</b> |
| <b>6.3 Methodology for counting.....</b>   | <b>18</b> |
| <b>6.3.1 Glass slide preparation for microscopy analysis for drum tape [13] [14] .....</b> | <b>18</b> |
| <b>6.3.2 Optical microscopy [14] [16] .....</b>  | <b>20</b> |
| <b>6.3.3 Identification [15] [16].....</b>   | <b>20</b> |
| <b>6.3.4 Counting method.....</b>  | <b>20</b> |
| <b>6.3.5 Data recording.....</b>   | <b>20</b> |
| <b>6.3.6 Conversion factor .....</b>   | <b>21</b> |
| <b>7 Performance characteristics [10] [11] [17] [18] [19] .....</b>                        | <b>22</b> |
| <b>7.1 General.....</b>  | <b>22</b> |
| <b>7.2 Performance requirements.....</b>   | <b>22</b> |
| <b>7.2.1 Repeatability.....</b>  | <b>22</b> |
| <b>7.3 Performance recommendations [18] [19] .....</b>                                     | <b>22</b> |
| <b>7.3.1 Reproducibility and accuracy.....</b>   | <b>22</b> |
| <b>7.3.2 Sensitivity and specificity.....</b>  | <b>22</b> |
| <b>Annex A (informative) Hirst type volumetric trap.....</b>                               | <b>24</b> |
| <b>Annex B (informative) Pictures of impaction support.....</b>                            | <b>25</b> |
| <b>Annex C (informative) Safety data sheet.....</b>  | <b>27</b> |
| <b>Annex D (informative) Key of determination .....</b>                                    | <b>28</b> |
| <b>Bibliography.....</b>   | <b>32</b> |

## **European foreword**

This document (CEN/TS 16868:2015) has been prepared by Technical Committee CEN/TC 264 "Air quality", the secretariat of which is held by DIN.

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## Introduction

Biological particles (pollen and fungal spores) are present in the air, causing health impacts at various levels. In Europe, nearly 18 % to 20 % of people suffer from pollinosis due to pollen and/or fungal spores. Pollen grains and fungal spores are considered in some Member States as an air pollutant as well as particles suspended in the air ( $PM_{10,2,5}$ ). In Europe, European Aerobiology Society (EAS) in coordination with International Association for Aerobiology (IAA) manage problems of sampling, analysis, quality control, development and information.

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

Sampling equipment is diversified (see Annex A). Analysis is based on optical light microscopy for identification and counting pollen grains and fungal spores.

Elements and reagents used during sampling and analysis have very specific properties and require to be handled carefully.

Given the close relationship between aerobiology and other sciences, one of the main aims is that information on airborne biological-particle counts should be of use in a wide range of disciplines and fields of application, including aerobiology, biodiversity, agriculture, forestry, phytopathology, meteorology, climatology, forensic science, bioterrorism, and health (sensitization and allergy).

## **1 Scope**

This European Standard specifies the procedure to sample continuously and 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).

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

## **2 Normative references**

Not applicable.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN