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Workplace exposure - Terminology

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/22

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EN 1540** 

**EUROPÄISCHE NORM** 

December 2021

ICS 01.040.13; 13.040.30

Supersedes EN 1540:2011

#### **English Version**

# Workplace exposure - Terminology

Exposition sur les lieux de travail - Terminologie

Exposition am Arbeitsplatz - Terminologie

This European Standard was approved by CEN on 5 December 2021.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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# EN 1540:2021 (E)

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## **European foreword**

This document (EN 1540:2021) has been prepared by Technical Committee CEN/TC 137 "Assessment of workplace exposure to chemical and biological agents", 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of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

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 EN 1540:2011.

The major technical changes between this document and the previous edition are as follows:

- a) The given terminology has been re-adjusted, where appropriate, to ISO 18158:2016, which represents a modified ISO-adoption of EN 1540:2011.
- b) The subdivision and order of the terms and definitions has partly been changed and simplified by deleting some subheadings.
- c) The following terms and definitions (admitted terms given in italic) have been added:
  - 1) General terms:
    - aerodynamic diameter, aerodynamic equivalent diameter, agglomerate, aggregate, air sampling device, appraiser, coagulation, diffusive diameter, diffusive equivalent diameter, dustiness mass fraction, effective density, equivalent density, exposure by inhalation, exposure profile, inhalation exposure, material density, median diameter, median particle diameter, microbial compound, mobility diameter, mobility equivalent diameter, nanomaterial, nano-object, nanoparticle, nanoscale, particle aerodynamic equivalent diameter, particle diffusive diameter, particle diffusive equivalent diameter, particle material density, particle mobility diameter, particle mobility equivalent diameter, particle number concentration, particle size, particle size distribution, particle surface area, similar exposure group, source domain, surface area, ultrafine particle, volume diameter, volume equivalent diameter
  - 2) Terms related to the physical and chemical processes of workplace air sampling: area sampling, back pressure, blank, blank sample, direct-reading instrument, flow-controlled pump, method blank, pressure drop, real-time monitor, stationary sampler, sampling cassette, vapour sampler

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- 3) Terms related to the analytical method: test gas
- 4) Terms related to method performance:

  collection efficiency, measurement bias, measurement precision, repeatability condition of

  measurement, reproducibility condition of measurement, sampler bias, sampling bias
- d) The term "thermodynamic diameter" is no longer used (see 3.1.2.12).
- e) The term "efficiency curve" has been deleted as synonymous term for "sampling efficiency".
- f) In Annex A, an additional column has been introduced for symbols commonly used.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This document specifies terms and definitions that are related to the assessment of workplace exposure to chemical and biological agents. These are either general terms or terms which are specific to physical and chemical processes of air sampling, the analytical method or method performance.

The terms included are those that have been identified as being fundamental because their definition is necessary to avoid ambiguity and ensure consistency of use.

### 2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN