SLOVENSKI STANDARD
SIST EN ISO 28439:2011

01-december-2011

Zrak na delovnem mestu - Karakterizacija ultrafinih aerosolov/nanoaerosolov - Določevanje porazdelitve velikosti in številčne koncentracije z uporabo analiznih sistemov za diferenčno mobilnost (ISO 28439:2011)

Workplace atmospheres - Characterization of ultrafine aerosols/nanoaerosols - Determination of the size distribution and number concentration using differential electrical mobility analysing systems (ISO 28439:2011)

Arbeitsplatzatmosphäre - Charakterisierung ultrafeiner Aerosole/Nanoaerosole - Bestimmung der Größenverteilung und Anzahlkonzentration mit differentiellen elektrischen Mobilitätsanalysesystemen (ISO 28439:2011)

Air des lieux de travail - Caractérisation des aérosols ultrafins/nanoaérosols - Détermination de la distribution granulométrique et de la concentration en nombre à l'aide de systèmes d'analyse différentielle de mobilité électrique (ISO 28439:2011)

Ta slovenski standard je istoveten z: **EN ISO 28439:2011**

ICS:

13.040.30	Kakovost zraka na delovnem mestu	Workplace atmospheres

SIST EN ISO 28439:2011 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 28439

April 2011

ICS 13.040.30

English Version

Workplace atmospheres - Characterization of ultrafine aerosols/nanoaerosols - Determination of the size distribution and number concentration using differential electrical mobility analysing systems (ISO 28439:2011)

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

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Foreword

This document (EN ISO 28439:2011) 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, in collaboration with Technical Committee ISO/TC 146 "Air quality".

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INTERNATIONAL STANDARD

ISO 28439

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Workplace atmospheres — Characterization of ultrafine aerosols/ nanoaerosols — Determination of the size distribution and number concentration using differential electrical mobility analysing systems

Air des lieux de travail — Caractérisation des aérosols ultrafins/ nanoaérosols — Détermination de la distribution granulométrique et de la concentration en nombre à l'aide de systèmes d'analyse différentielle de mobilité électrique

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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Introduction

Within occupational hygiene, aerosol concentrations have been traditionally measured in terms of mass concentrations. For some ultrafine aerosols and nanoaerosols, other exposure metrics such as the number and surface area concentration are likely to become important for predicting health effects, depending on chemical and physical properties. This International Standard provides a method for determining the number concentration and size distribution of ultrafine aerosols and nanoaerosols at workplaces by using differential mobility analysing systems (DMASs). This can be used by occupational hygienists and researchers to measure the concentration at some workplaces. The system is generally not suitable for personal exposure measurements.