Dit document mag slechts op een stand-alone PC worden geinstalleerd. Gebruik op een netwerk is alleen. toestaan als een aanvullende licentieovereenkomst voor netwerkgebruik met NEN is afgesloten. This document may only be used on a stand-alone PC. Use in a network is only permitted when a supplementary license agreement for us in a network with NEN has been concluded.

Voorbeeld Preview

Nederlandse norm

NEN-EN 14907

(en)

Ambient air quality - Standard gravimetric measurement method for the determination of the PM2,5 mass fraction of suspended particulate matter

Vervangt NEN-EN 14907:2004 Ontw.

ICS 13.040.20

september 2005

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Als Nederlandse norm is aanvaard:
- EN 14907:2005,IDT

Voorbeeld
Preview

Normcommissie 390 146 "Luchtkwaliteit"

Apart from exceptions provided by the law, nothing from this publication may be duplicated and/or published by means of photocopy, microfilm, storage in computer files or otherwise, which also applies to full or partial processing, without the written consent of the Netherlands Standardization Institute.

The Netherlands Standardization Institute shall, with the exclusion of any other beneficiary, collect payments owed by third parties for duplication and/or act in and out of law, where this authority is not transferred or falls by right to the Reproduction Rights Foundation.

Although the utmost care has been taken with this publication, errors and omissions cannot be entirely excluded. The Netherlands Standardization Institute and/or the members of the committees therefore accept no liability, not even for direct or indirect damage, occurring due to or in relation with the application of publications issued by the Netherlands Standardization Institute.

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden verveelvoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor verveelvoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaarden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdend met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

NEN

©2005 Nederlands Normalisatie-instituut
Postbus 5059, 2600 GB Delft
Telefoon (015) 2 690 390, Fax (015) 2 690 190

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Nederlands voorwoord

Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

vermelde norm	Nederlandse norm	titel
ENV 13005	NVN-ENV 13005	Leidraad voor de bepaling en aanduiding van de meetonzekerheid (en)
CR 14377	NPR-CR 14377	Luchtkwaliteit - Benadering van de onzekerheid bij referentiemeetmethoden van buitenlucht (en)

Voorbeeld
Preview

Dit document is een voorbeeld van NEN / This document is a preview by NEN

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14907

September 2005

ICS 13.040.20

English Version

Ambient air quality - Standard gravimetric measurement method for the determination of the PM2,5 mass fraction of suspended particulate matter

Qualité de l'air ambiant - Méthode de mesurage gravimétrique de référence pour la détermination de la fraction massique PM 2,5 de matière particulaire en suspension

Luftbeschaffenheit - Gravimetrisches Standardmessverfahren für die Bestimmung der PM2,5-Massenfraktion des Schwebstaubs

LOCKED
Preview

This European Standard was approved by CEN on 22 July 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2005 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 14907:2005: E

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Contents

page

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Foreword

This European Standard (EN 14907:2005) 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 March 2006, and conflicting national standards shall be withdrawn at the latest by March 2006.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this European Standard.

As part of a continuous quality improvement, it is anticipated that this standard and EN 12341 (PM_{10}) may be reviewed by the Technical Committee in the near future.

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

Voorbeeld
Preview

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Introduction

For air quality across the European Union to be assessed on a consistent basis, Member States need to employ standard measurement techniques and procedures. The aim of this European Standard is to present a harmonised methodology for monitoring the 2,5 µm mass fraction of suspended particulate matter ($PM_{2,5}$) in ambient air, following Community Directive 96/62/EC on ambient air quality assessment and management [1], and Council Directive 1999/30/EC relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air [2], which sets the parameters specific to the assessment of particulate matter.

The standard method set out in this European Standard is focused primarily on harmonisation and improvement of the data quality of measurement methods used in monitoring networks, but is not necessarily best suited for practical use in routine monitoring.

There are no traceable reference standards for $PM_{2,5}$ measurements. Therefore, the standard method set out in this European Standard defines the measured quantity by convention, specifically by the sample inlet design and associated operational parameters covering the whole measurement process. The standard contains:

— manual gravimetric standard measurement method for $PM_{2,5}$ using single filters;

— summary of performance characteristics of the method, including measurement uncertainty;

— procedure for determining whether non-standard measurement methods (like other manual gravimetric or automatic monitoring methods) are equivalent to this standard method (Annex A).

The precision and performance characteristics described in this European Standard were determined in 9 different comparative and validation trials. The trials were performed at 9 different sites in northern, middle and southern European countries in order to cover a wide range of relevant ambient air conditions. The trials were sponsored by the European Commission and the European Free Trade Association.

In addition to the measurement procedure of the 2,5 µm mass fraction of suspended particulate matter ($PM_{2,5}$) in ambient air being described in this European Standard, there is European Standard EN 12341 [3] dealing with the measurement of PM_{10}.

Preview

Dit document is een voorbeeld van NEN / This document is a preview by NEN

1 Scope

This European Standard describes a standard method for determining the $PM_{2,5}$ mass concentration of suspended particulate matter in ambient air by sampling the particulate matter on filters and weighing them by means of a balance.

Measurements are made over a sampling period of about 24 h, and in line with the Directive, are expressed as $\mu g/m^3$, where the volume of air is the volume at ambient conditions near the inlet at the time of sampling.

The range of application of the standard is from 1 $\mu g/m^3$ (i.e. the limit of detection of the standard measurement method expressed as its uncertainty) up to 120 $\mu g/m^3$ (i.e. the maximum concentration level observed during the field study undertaken by CEN/TC 264/WG 15 to validate the standard).

NOTE Although the standard is not validated for concentrations over 120 $\mu g/m^3$, its range of application could well be extended to commonly encountered ambient concentrations up to circa 200 $\mu g/m^3$ when using glass or quartz fibre filters. At these high concentrations and particulate mass loadings no filter clogging is to be expected. Also the flow rate can be easily maintained at the nominal setting.

The equivalence procedure in Annex A specifies two approaches, depending on whether the candidate method differs slightly or fundamentally from the standard method.

In the former case, involving only slight differences from the standard method ("variations on a theme") Annex A provides a restricted procedure to compare only the pertinent differences, instead of a full field test. This part of the annex serves to give practical guidance for determining equivalence for measurement methods commonly used in monitoring networks, and includes examples of common variations to the standard method, such as different filter storing or conditioning procedures and the variation of the standard method for the application as automated filter changer.

In the latter case, involving a full set of field tests, the procedure serves to determine equivalence only within the range of conditions under which the field tests are carried out. The equivalence can be shown to hold for conditions prevailing within European countries by carrying out the field test in situations covering a suitable range of relevant ambient parameters (such as concentration and composition of the suspended particulate matter, temperature, and humidity).

Although this European Standard does not explicitly address automatic monitoring methods for the measurement of the $PM_{2,5}$ mass fraction in ambient air, the equivalence test procedure in Annex A applies both to non-automatic and automatic methods.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ENV 13005, *Guide to the expression of uncertainty in measurements*

CR 14377, *Air quality – Approach to uncertainty estimation for ambient air reference measurement methods*

Preview NEN

Dit document is een voorbeeld van NEN / This document is a preview by NEN

Bestelformulier

Stuur naar:

NEN Standards Products & Services
t.a.v. afdeling Klantenservice
Antwoordnummer 10214
2600 WB Delft

NEN Standards Products & Services

Postbus 5059
2600 GB Delft

Vlinderweg 6
2623 AX Delft

T (015) 2 690 390
F (015) 2 690 271

www.nen.nl/normshop

Ja, ik bestel

__ ex. NEN-EN 14907:2005 en Luchtkwaliteit - Algemene gravimetrische referentiemethode voor de bepaling van de PM2,5-massafractie van zwevende stof in de buitenlucht	€ 62.00

Wilt u deze norm in PDF-formaat? Deze bestelt u eenvoudig via www.nen.nl/normshop

Gratis e-mailnieuwsbrieven

Wilt u op de hoogte blijven van de laatste ontwikkelingen op het gebied van normen, normalisatie en regelgeving? Neem dan een gratis abonnement op een van onze e-mailnieuwsbrieven. www.nen.nl/nieuwsbrieven

Gegevens

Bedrijf / Instelling

T.a.v. O M O V

E-mail

Klantnummer NEN

Uw ordernummer BTW nummer

Postbus / Adres

Postcode Plaats

Telefoon Fax

Factuuradres (indien dit afwijkt van bovenstaand adres)

Postbus / Adres

Postcode Plaats

Datum Handtekening

Retourneren

Fax: 015 2 690 271
E-mail: klantenservice@nen.nl
Post: NEN Standards Products & Services,
t.a.v. afdeling Klantenservice
Antwoordnummer 10214,
2600 WB Delft
(geen postzegel nodig).

Voorwaarden

- De prijzen zijn geldig tot 31 december 2018, tenzij anders aangegeven.
- Alle prijzen zijn excl. btw, verzend- en handelingskosten en onder voorbehoud bij o.m. ISO- en IEC-normen.
- Bestelt u via de normshop een pdf, dan betaalt u geen handeling en verzendkosten.
- Meer informatie: telefoon 015 2 690 391, dagelijks van 8.30 tot 17.00 uur.
- Wijzigingen en typefouten in teksten en prijsinformatie voorbehouden.
- U kunt onze algemene voorwaarden terugvinden op: www.nen.nl/leveringsvoorwaarden.