

**Välisõhu kvaliteet. Standardmeetod
süsinik-monooksiidi kontsentratsiooni
mõõtmiseks hajumisvaba
infrapunaspektroskoobiga**

Ambient air quality - Standard method for the
measurement of the concentration of carbon
monoxide by nondispersive infrared spectroscopy

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14626:2005 sisaldab Euroopa standardi EN 14626:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14626:2005 consists of the English text of the European standard EN 14626:2005.</p> <p>This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This document specifies a continuous measurement method for the determination of the concentration of carbon monoxide present in ambient air based on the non-dispersive infrared measuring principle (NDIR).</p>	<p>Scope: This document specifies a continuous measurement method for the determination of the concentration of carbon monoxide present in ambient air based on the non-dispersive infrared measuring principle (NDIR).</p>
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Võtmesõnad:

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English version

**Ambient air quality - Standard method for the measurement of
the concentration of carbon monoxide by nondispersive infrared
spectroscopy**

Qualité de l'air ambiant - Méthode normalisée de mesurage
de la concentration en monoxyde de carbone par la
méthode à rayonnement infrarouge non-dispersif

Luftqualität - Messverfahren zur Bestimmung von
Kohlenmonoxid in Luft mit dem NDIR-Verfahren

This European Standard was approved by CEN on 10 December 2004.

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.

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Foreword

This document (EN 14626:2005) 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 September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

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.

1 Scope

This document specifies a continuous measurement method for the determination of the concentration of carbon monoxide present in ambient air based on the non-dispersive infrared measuring principle (NDIR). This document describes the performance characteristics and sets the relevant minimum criteria required to select an appropriate non-dispersive infrared carbon monoxide analyser by means of type approval tests. It also includes the evaluation of the suitability of an analyser for use in a specific fixed site so as to meet the Directives data quality requirements and requirements during sampling, calibration and quality assurance.

The method is applicable to the determination of the mass concentration of carbon monoxide present in ambient air in the range from 0 mg/m³ to 100 mg/m³ carbon monoxide. This concentration range represents the certification range for the type approval test.

NOTE 1 0 mg/m³ to 100 mg/m³ of CO corresponds to 0 µmol/mol to 86 µmol/mol of CO.

The method covers the determination of ambient air concentrations of carbon monoxide in zones classified as rural areas, urban-background areas and traffic-orientated locations.

NOTE 2 Other ranges may be used for measurement systems applied at rural locations monitoring Ecosystems.

The results are expressed in mg/m³ (at 293 K and 101,3 kPa).

When the standard is used for other purposes than the EU directive, the range and uncertainty requirements need not apply.

2 Normative references

The following referenced documents are indispensable for the application of this document. 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 measurement*

EN ISO 14956:2002, *Air quality — Evaluation of the suitability of a measurement procedure by comparison with a required measurement uncertainty (ISO 14956:2002)*

ISO 6143, *Gas analysis — Comparison methods for determining and checking the composition of calibration gas mixtures*

ISO 6144, *Gas analysis — Preparation of calibration gas mixtures — Static volumetric method*

ISO 6145 (all parts), *Gas analysis — Preparation of calibration gas mixtures using dynamic volumetric methods*