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National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 13526:2002

ICS 13.040.40

STATIONARY SOURCE EMISSIONS - DETERMINATION OF THE MASS CONCENTRATION OF TOTAL GASEOUS ORGANIC CARBON IN FLUE GASES FROM SOLVENT USING PROCESSES - CONTINUOUS FLAME IONISATION DETECTOR METHOD

National Standards
Authority of Ireland
Dublin 9
Ireland

Tel. (01) 807 3800
Tel (01) 807 3838

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13526

November 2001

ICS 13.040.40

English version

Stationary source emissions - Determination of the mass concentration of total gaseous organic carbon in flue gases from solvent using processes - Continuous flame ionisation detector method

Emissionen aus stationären Quellen - Bestimmung der Massenkonzentration des gesamten gasförmigen organisch gebundenen Kohlenstoffs in Abgasen von Prozessen, bei denen Lösungsmittel eingesetzt werden - Kontinuierliches Verfahren unter Verwendung eines Flammenionisationsdetektors

This European Standard was approved by CEN on 29 September 2001.

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

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Foreword

This European Standard 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of an identical text or by endorsement, at the latest by May 2002, and conflicting national standards shall be withdrawn at the latest by May 2002.

This European Standard has been prepared under a mandate given to CEN by the European Commission and European Free Trade Association.

The annex B is normative. The annexes A, C, D, E and F are informative.

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

1 Scope

This European Standard specifies a set of minimum performance requirements for an instrument using flame ionisation detection, together with procedures for its calibration and operation, for the measurement of the mass concentration of total gaseous organic carbon (TOC) in flue gases.

This European Standard is suitable for the measurement of gaseous or vapour phase TOC emissions from Solvent Using Processes.

NOTE 1 See Council Directive 1999/13/EEC.

The results obtained using this standard are expressed in milligrams per cubic metre as total carbon (mg/m^3). This standard is suitable for the measurement of concentrations from 20 mg/m^3 to 500 mg/m^3 but can be used at lower concentrations.

NOTE 2 By its nature a flame ionisation detector (FID) can also be used to measure higher concentrations.

The method specified in this European Standard can be used as a reference method or, with suitable minimum operational requirements, for continuous monitoring. It can also be used for the calibration of automated measuring systems. An indication of the uncertainty of the measurement is shown in annex A.

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2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13649	Stationary source emissions - Determination of the mass concentration of individual gaseous organic compounds – Activated carbon and solvent desorption method.
ISO 5725-1	Accuracy (trueness and precision) of measurement methods and results Part 1: General principles and definitions.
ISO 6879	Air quality - Performance characteristics and related concepts for air quality measuring methods.
ISO 9169	Air Quality – Determination of performance characteristics of measurement methods.

3 Terms and definitions

For the purpose of this CEN Standard, the following definitions apply.

3.1
combustion air
air supply used for the combustion of fuel gas in an instrument using flame ionisation detection

3.2
complimentary gas
component of a calibration gas mixture which completes a calibration gas mixture

3.3
detection limit
minimum concentration of a substance which produces an observable response, as detailed in annex B and referred to in ISO 9169

3.4
dilution gas
gas used to dilute sampled flue gas to prevent water condensation

3.5
flame ionisation detector (FID)
instrument using flame ionisation detection

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