



NSAI
Standards

Irish Standard
I.S. EN 14791:2017

Stationary source emissions - Determination of mass concentration of sulphur oxides - Standard reference method

I.S. EN 14791:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 14791:2017 is the adopted Irish version of the European Document EN 14791:2017, Stationary source emissions - Determination of mass concentration of sulphur oxides - Standard reference method

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EUROPEAN STANDARD

EN 14791

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2017

ICS 13.040.40

Supersedes EN 14791:2005

English Version

Stationary source emissions - Determination of mass concentration of sulphur oxides - Standard reference method

Emissions de sources fixes - Détermination de la concentration massique des oxydes de soufre -
Méthode de référence normalisée

Emissionen aus stationären Quellen - Bestimmung der
Massenkonzentration von Schwefeloxiden -
Standardreferenzverfahren

This European Standard was approved by CEN on 26 September 2016.

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Contents	Page
European foreword.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Symbols and abbreviations	13
4.1 Symbols.....	13
4.2 Abbreviated terms	14
5 Principle	14
5.1 General.....	14
5.2 Measuring principle	14
6 Description of measuring system.....	15
6.1 Reagents	15
6.1.1 General.....	15
6.1.2 Hydrogen peroxide.....	15
6.1.3 Water	15
6.1.4 Absorption solution, H ₂ O ₂	15
6.1.5 Reagents for chromatographic analysis	15
6.1.6 Reagent for Thorin analysis	16
6.2 Sampling equipment.....	17
6.2.1 General.....	17
6.2.2 Sampling probe	17
6.2.3 Filter housing.....	17
6.2.4 Particle filter.....	18
6.2.5 Temperature controller.....	18
6.2.6 Absorbers.....	18
6.2.7 Sample gas pump.....	18
6.2.8 Gas volume meter	18
6.3 Analysis equipment.....	19
6.3.1 Ion chromatograph.....	19
6.3.2 Thorin method	19
7 Performance characteristics of the SRM.....	20
7.1 General.....	20
7.2 Performance characteristics of the sampling system	21
7.3 Performance characteristics of the analysis	21
7.3.1 Sources of uncertainty.....	21
7.3.2 Performance criterion of analysis	22
7.4 Establishment of the uncertainty budget	22
8 Field operation.....	23
8.1 Measurement planning	23
8.2 Sampling strategy.....	23
8.2.1 General.....	23
8.2.2 Measurement section and measurement plane.....	23

8.2.3	Minimum number and location of measurement points	24
8.2.4	Measurement ports and working platform.....	24
8.3	Assembling the equipment.....	24
8.4	Heating of the sample gas line	24
8.5	Leak test.....	24
8.6	Performing sampling.....	25
8.6.1	Introduction of the sampling probe in the duct	25
8.6.2	Sampling	25
8.6.3	Rinsing of the sampling system and preparation of the samples	25
8.7	Measurement series	26
8.8	Field blank.....	26
8.9	Absorption efficiency	26
8.9.1	General	26
8.9.2	Test of absorption efficiency	26
9	Analytical procedure	27
9.1	General	27
9.2	Ion Chromatography method.....	27
9.2.1	General procedure	27
9.2.2	Interferences.....	28
9.2.3	Calibration.....	28
9.3	Thorin Method.....	29
9.3.1	Pre-treatment of sample solution before analysis for Thorin method.....	29
9.3.2	General procedure	29
9.3.3	Preparation of a chemical blank solution.....	30
9.3.4	Interferents.....	30
10	Expression of results	31
11	Equivalence of Thorin and ion chromatography methods.....	33
11.1	General	33
11.2	Range.....	33
11.3	Matrix effect.....	33
11.4	Comparison of repeatability and trueness.....	33
12	Equivalence of an alternative method	34
13	Measurement report	34
Annex A	(informative) Validation of the method in the field.....	35
A.1	General	35
A.2	Round robin test of analytical methods	35
A.3	Field tests.....	36
A.3.1	General	36
A.3.2	Characteristics of installations	36
A.3.3	Limits of quantification	38
A.3.4	Repeatability and reproducibility	38
A.3.4.1	General	38
A.3.4.2	Repeatability	39
A.3.4.3	Reproducibility.....	41
A.3.5	Absorption efficiency	42

EN 14791:2017 (E)

Annex B (informative) Examples of absorbers.....	43
Annex C (informative) Example of assessment of compliance of standard reference method for SO₂ with requirements on emission measurements	44
C.1 Introduction	44
C.2 Elements required for the uncertainty determinations	44
C.3 Example of an uncertainty calculation	44
C.3.1 Specific conditions in the field.....	44
C.3.2 Performance characteristics.....	46
C.3.3 Model equation and application of rule of uncertainty propagation.....	47
C.3.3.1 Concentration of SO₂	47
C.3.3.2 Calculation of the combined uncertainty of $V_{m,ref}$ and C_m	48
C.3.3.3 Calculation of sensitivity coefficients	48
C.3.3.4 Results of the standard uncertainties calculations.....	49
C.3.4 Estimation of the combined uncertainty	52
Annex D (informative) Type of sampling equipment.....	53
Annex E (informative) Example of comparison of repeatability and trueness of Thorin Method and Ion Chromatography Method.....	54
Annex F (informative) Calculation of the uncertainty associated with a concentration expressed on dry gas and at an oxygen reference concentration	64
F.1 Uncertainty associated with a concentration expressed on dry gas	64
F.2 Uncertainty associated with a concentration expressed at a oxygen reference concentration	66
Annex G (informative) Significant technical changes	68
Bibliography.....	69

European foreword

This document (EN 14791:2017) has been prepared by Technical Committee CEN/TC 264 "Air quality", the secretariat of which is held by DIN.

This document supersedes EN 14791:2005.

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 July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

Annex G provides details of significant technical changes between this document and the previous edition.

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EN 14791:2017 (E)

1 Scope

This European Standard specifies the standard reference method (SRM) for the determination of the sulphuric oxide SO₂ in flue gases emitted to the atmosphere from ducts and stacks. It is based on a sampling system and two analytical principles: ion chromatography and the Thorin method.

This European Standard specifies the performance characteristics to be determined and the performance criteria to be fulfilled by measuring systems based on the measurement method. It applies to periodic monitoring and to the calibration or control of automatic measuring systems (AMS) permanently installed on a stack, for regulatory or other purposes.

This European Standard specifies criteria for demonstration of equivalence of an alternative method to the SRM by application of EN 14793:2017.

This European Standard has been validated during field tests on waste incineration, co-incineration and large combustion installations. It has been validated for sampling periods of 30 min in the range of 0,5 mg/m³ to 2 000 mg/m³ of SO₂ for an ion-chromatography variant and 5 mg/m³ to 2 000 mg/m³ of SO₂ for the Thorin method according to emission limit values laid down in the Directive 2010/75/EU.

NOTE 1 Emission limit values for SO₂ laid down in the Directive 2010/75/EU are in the range of 30 mg/m³ to 800 mg/m³.

The emission limit values of EU Directives are expressed in units of mg/m³ of SO₂ on dry basis and at standard conditions of 273 K and 101,3 kPa.

NOTE 2 The characteristics of installations, the conditions during field tests and the values of repeatability and reproducibility in the field are given in Annex A.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

prEN 13284-1:2015, *Stationary source emissions – Determination of low range mass concentration of dust – Part 1: Manual gravimetric method*

EN 14793:2017, *Stationary source emission – Demonstration of equivalence of an alternative method with a reference method*

EN 15259:2007, *Air quality - Measurement of stationary source emissions - Requirements for measurement sections and sites and for the measurement objective, plan and report*

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/IEC Guide 98-3:2008, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

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