



NSAI
Standards

Irish Standard
I.S. EN 15216:2021

Environmental solid matrices - Determination of total dissolved solids (TDS) in water and eluates

I.S. EN 15216:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 15216:2021

Published:

2021-10-20

*This document was published
under the authority of the NSAI
and comes into effect on:*

2021-11-07

ICS number:

13.030.20

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 15216:2021 is the adopted Irish version of the European Document EN 15216:2021, Environmental solid matrices - Determination of total dissolved solids (TDS) in water and eluates

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 15216

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2021

ICS 13.030.20

Supersedes EN 15216:2007

English Version

Environmental solid matrices - Determination of total dissolved solids (TDS) in water and eluates

Matrices environnementales solides - Détermination
de la concentration en matières solides dissoutes
totales (TDS) de l'eau et des éluats

Umweltrelevante Matrices - Bestimmung des
Gesamtgehaltes an gelösten Feststoffen (TDS) in
Wasser und Eluaten

This European Standard was approved by CEN on 11 July 2021.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Principle	5
5 Sample storage and preparation	5
6 Equipment	5
7 Procedure.....	6
8 Calculation of results	6
9 Test report.....	7
Annex A (informative) Performance characteristics	8
Bibliography.....	9

European foreword

This document (EN 15216:2021) has been prepared by Technical Committee CEN/TC 444 “Environmental characterization of solid matrices”, the secretariat of which is held by NEN.

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 April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

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

This document supersedes EN 15216:2007.

In comparison with EN 15216:2007, the following changes have been made:

- Textual changes to clarify the procedure after a third weighing and in case of observed inhomogeneity.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

EN 15216:2021 (E)

Introduction

Total dissolved solids are a common sum parameter that is in use in water analysis and in analysis of eluates.

1 Scope

This document specifies a method for the determination of total dissolved solids (TDS) in water and eluates (see Annex A), provided they are not volatile under the conditions specified or that they do not release water molecules from hydration. It applies to water and eluates containing more than 100 mg/l of total dissolved solids. Samples with lower amounts of dissolved solids can be analysed by repetition of the drying step.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

total dissolved solids

TDS

ρ_{TDS}

mass of dissolved constituents per unit volume of water remaining after a specified filtering and drying process

Note 1 to entry: TDS is expressed in milligrams per litre.

4 Principle

The test sample is filtered and then dried in a dish to a constant mass in an oven at $(105 \pm 5) ^\circ\text{C}$.

5 Sample storage and preparation

It is recommended to carry out the test immediately, but not later than one week after sampling of the water sample or preparation of the eluate.

During storage, the laboratory sample may be subject to changes which are liable to influence the analysis result. If storage is necessary, samples shall be kept at $2 ^\circ\text{C}$ to $8 ^\circ\text{C}$.

6 Equipment

6.1 Drying system thermostatically controlled and capable of maintaining a temperature of $(105 \pm 5) ^\circ\text{C}$; e.g. drying oven, infrared system.

6.2 Desiccator with an active drying agent such as silica gel.

6.3 Analytical balance with an accuracy of 1 mg or better.

6.4 Membrane filter (porosity of $0,45 \mu\text{m}$).

6.5 Filtration apparatus.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-