



NSAI
Standards

Irish Standard Recommendation
S.R. CEN/TS 17776:2022

Organic and organo-mineral fertilizers - Determination of the total organic carbon (TOC) content by dry combustion

S.R. CEN/TS 17776:2022

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:

CEN/TS 17776:2022

Published:

2022-04-06

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

2022-04-24

ICS number:

65.080

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

S.R. CEN/TS 17776:2022 is the adopted Irish version of the European Document CEN/TS 17776:2022, Organic and organo-mineral fertilizers - Determination of the total organic carbon (TOC) content by dry combustion

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

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 17776

April 2022

ICS 65.080

English Version

**Organic and organo-mineral fertilizers - Determination of
the total organic carbon (TOC) content by dry combustion**

Engrais organiques et organo-minéraux -
Détermination de la teneur en carbone organique

Organische und organisch-mineralische Düngemittel -
Bestimmung des Gehalts an organischem Kohlenstoff
(TOC) durch trockene Verbrennung

This Technical Specification (CEN/TS) was approved by CEN on 13 March 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Process.....	5
4.1 Principle	5
4.2 Applicability.....	5
4.3 Interferences	5
5 Reagents	5
6 Apparatus	6
7 Procedure	6
7.1 Sampling and sample preparation	6
7.2 Determination.....	7
7.3 Calibration.....	8
7.4 Control measurements	9
8 Calculation and expression of results	9
9 Test report.....	10
Annex A (informative) Example of operational information	12
Bibliography	14

European foreword

This document (CEN/TS 17776:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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 has been prepared under a standardisation request given to CEN by the European Commission and the European Free Trade Association.

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 announce this Technical Specification: 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.

CEN/TS 17776:2022 (E)

1 Scope

This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [5]. However, the present method was not validated for blends.

This document specifies a method for the determination of total organic carbon (TOC) by elemental analysis using dry combustion. The method is applicable to organic and organo-mineral fertilizers containing more than 1 g carbon per kg of dry matter (0,1 %), with the exclusion of organo-mineral fertilizers containing urea-formaldehyde polymers as long as there is no method available to assess carbon in urea-formaldehyde polymers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

CEN/TS 17771, *Organic and organo-mineral fertilizers — Determination of the nitrogen content*

CEN/TS 17773, *Organic and organo-mineral fertilizers — Determination of the dry matter content*

EN 15705, *Fertilizers — Determination of urea condensates using high-performance liquid chromatography (HPLC) — Isobutylidenediurea and crotonylidenediurea (method A) and methylen-urea oligomers (method B)*

EN ISO 3696:1995, *Water for analytical laboratory use — Specification and test methods (ISO 3696: 1987)*

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 organic carbon

TOC

quantity of carbon that is converted into carbon dioxide by combustion and which is not liberated as carbon dioxide by acid treatment

Note 1 to entry: In agreement with Regulation (EU) 2019/1009 [5], carbon derived from urea and polymers containing urea are not considered as organic in this document.

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
-