EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16640:2017/AC

July 2017
Juillet 2017
Juli 2017

ICS 13.020.55; 71.040.40; 83.040.01

English version
Version Française
Deutsche Fassung

Bio-based products - Bio-based carbon content - Determination of the bio-based carbon content using the radiocarbon method

Produits biosourcés - Teneur en carbone biosourcé - Détermination de la teneur en carbone biosourcé par la méthode au radiocarbone

Biobasierte Produkte - Gehalt an biobasiertem Kohlenstoff - Bestimmung des Gehalts an biobasiertem Kohlenstoff mittels Radiokarbonmethode

This corrigendum becomes effective on 12 July 2017 for incorporation in the official English version of the EN.

Ce corrigendum prendra effet le 12 juillet 2017 pour incorporation dans la version anglaise officielle de la EN.

Die Berichtigung tritt am 12. Juli 2017 zur Einarbeitung in die offizielle Englische Fassung der EN in Kraft.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

1 Modifications to Annex D

Delete

"D.5 Principle

The accelerator mass spectrometry (AMS) method determines the presence of ^{14}C directly. The atoms in the sample are converted into a beam of ions. The formed ions are accelerated in an electric field, deflected in a magnetic field and detected in ion detectors resulting in the determination of the relative isotope abundances of these ions.

AMS uses a high potential electrostatic field, which serves not only to accelerate them but also to specifically form only C^{n+} ions (n = 1,,,4) that are allowed into the spectrometer, excluding all other ionic species. This greatly enhances sensitivity without compromising selectivity. As the ^{14}C is determined in graphite (carbon), all the carbon in the samples has to be converted into graphite before analysing.

With AMS, the modern fraction in the carbon, present in the sample, is determined. The total carbon content is not determined with this technique and shall be determined separately."

Subsequent subclauses renumbered:

D.5 Procedure

D.6 Calculation of the results

2 Modifications to Annex E

Insert

"E.2 Principle

The accelerator mass spectrometry (AMS) method determines the presence of ^{14}C directly. The atoms in the sample are converted into a beam of ions. The formed ions are accelerated in an electric field, deflected in a magnetic field and detected in ion detectors resulting in the determination of the relative isotope abundances of these ions.

AMS uses a high potential electrostatic field, which serves not only to accelerate them but also to specifically form only C^{n+} ions (n = 1,,,4) that are allowed into the spectrometer, excluding all other ionic species. This greatly enhances sensitivity without compromising selectivity. As the ^{14}C is determined in graphite (carbon), all the carbon in the samples has to be converted into graphite before analysing.

With AMS, the modern fraction in the carbon, present in the sample, is determined. The total carbon content is not determined with this technique and shall be determined separately."

Subsequent subclauses renumbered:

E.3 Reagents and materials

E.4 Apparatus

E.5 Procedure

E.6 Calculation of the results