

ISO 16620-2:2019-10 (E)

P lastics - Biobased content - Part 2: Determination of biobased carbon content

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions, symbols and abbreviated terms	1
3.1	Terms and definitions	1
3.2	Symbols	2
3.3	Abbreviated terms	2
4	Principle	3
5	Sampling	3
6	Determination of the ¹⁴C content	4
6.1	General	4
6.2	Principle	4
6.3	Procedure for the conversion of the carbon present in the sample to a suitable sample for ¹⁴C determination	4
6.4	Measurement techniques	4
7	Determination of the total carbon content and total organic carbon content	5
8	Calculation of the biobased carbon content	5
8.1	General	5
8.2	Correction factors	5
8.3	Calculation method	6
8.3.1	Calculation of the biobased carbon content by mass, xB	6
8.3.2	Calculation of the biobased carbon content, xB TC , as a fraction of TC	7
8.3.3	Calculation of the biobased carbon content, xB TOC , as a fraction of TOC	7
8.3.4	Examples	7
9	Test report	8
Annex A (normative)	Procedure for the conversion of the carbon present in the sample to a suitable sample for ¹⁴C determination	9
Annex B (normative)	Method A -- Determination by liquid scintillation counter method (LSC)	14
Annex C (informative)	Method B -- ¹⁴C determination by beta-ionization	17
Annex D (normative)	Method C -- ¹⁴C determination by accelerator mass spectrometry	20
Bibliography		23