

# ISO 16620-2:2015-04 (E)

## Plastics - Biobased content - Part 2: Determination of biobased carbon content

---

<b>Contents</b>		<b>Page</b>
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 <sup>14</sup> C content .....	3
6.1	General .....	3
6.2	Principle .....	4
6.3	Procedure for the conversion of the carbon present in the sample to a suitable sample for <sup>14</sup> C determination .....	4
6.4	Measurement techniques .....	4
7	Determination of the total carbon content and total organic carbon content .....	4
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 .....	6
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 .....	7
Annex A (normative)	Procedure for the conversion of the carbon present in the sample to a suitable sample for <sup>14</sup> C determination .....	9
Annex B (normative)	Method A -- Determination by liquid scintillation counter method (LSC) .....	12
Annex C (normative)	Method B -- <sup>14</sup> C determination by beta-ionization .....	15
Annex D (normative)	Method C -- <sup>14</sup> C determination by accelerator mass spectrometry .....	18
Bibliography .....		21