

# ISO 19984-2:2017-08 (E)

## Rubber and rubber products - Determination of biobased content - Part 2: Biobased carbon content

---

Contents	Page
<b>Foreword</b> .....	iv
<b>Introduction</b> .....	v
<b>1 Scope</b> .....	1
<b>2 Normative references</b> .....	1
<b>3 Terms and definitions</b> .....	1
<b>4 Principle</b> .....	2
<b>5 Sampling</b> .....	3
<b>6 Measuring method of biobased carbon content by determination of <math>^{14}\text{C}</math> content for rubber products and raw materials</b> .....	3
<b>6.1 General</b> .....	3
<b>6.2 Sample preparation and two methods to determine <math>^{14}\text{C}</math> concentration</b> .....	4
<b>6.3 Calculation of the biobased carbon content</b> .....	4
<b>6.3.1 General</b> .....	4
<b>6.3.2 Correction factor</b> .....	4
<b>6.3.3 Calculation of B TC , the biobased carbon content by Method A (AMS)</b> .....	5
<b>6.3.4 Calculation of B TC , the biobased carbon content by Method B (LSC)</b> .....	5
<b>6.3.5 Examples</b> .....	5
<b>7 Precision</b> .....	6
<b>8 Test report</b> .....	6
<b>Annex A (normative) Method A -- Determination by accelerator mass spectrometry (AMS)</b> .....	7
<b>Annex B (normative) Method B -- Determination by liquid scintillation counter (LSC)</b> .....	10
<b>Annex C (informative) Examples of the determination of biobased carbon content for rubber and rubber products</b> .....	13
<b>Annex D (informative) Determination of the biobased carbon content of a tyre</b> .....	15
<b>Annex E (informative) Precision results from an interlaboratory test programme</b> .....	18
<b>Bibliography</b> .....	20