ISO 19984-3:2017-08 (E)

Rubber and rubber products - Determination of biobased content - Part 3: Biobased mass content

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Principle 2

5 Separation of a vulcanized rubber sample and determination of the biobased mass content 2
5.1 General 2
5.2 Reagents and materials 3
5.3 Apparatus 3
5.4 Sampling 4
5.5 Procedure 4
5.5.1 Solvent extraction 4
5.5.2 Separation of the rubber from a vulcanized rubber 4
5.5.3 Separation of inorganic ingredients (including carbon black) from a vulcanized rubber 5
5.5.4 Determination of the biobased carbon content 7
5.6 Determination of the content of rubber and carbon black 7
5.7 Calculation 7
5.7.1 Biobased mass content of each component 7
5.7.2 Calculation of the biobased mass content of a vulcanized rubber sample 8
5.8 Examples of determinations 9

6 Determination of the biobased mass content of raw materials or latices 9
6.1 Determination of the biobased carbon content 9
6.2 Calculation 9

7 Precision 9

8 Test report 10

Annex A (informative)Confirmationoftheblendratioofseparatedrubber 11

Annex B (informative) Precision results from an interlaboratory test programme 13

Annex C (informative) Examples of determination of biobased mass content of a rubber model composite 15

Annex D (informative) Examples of the determination of biobased mass content for rubber and rubber products 17

Annex E (informative) Determination of the biobased mass content of a tyre 18

Bibliography 19