

ISO 19984-1:2017-08 (E)

Rubber and rubber products - Determination of biobased content - Part 1: General principles and calculation methods using the formulation of the rubber compound

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
4.1 Identification indices for rubber or a rubber product to determine the biobased content. 2 4.2 Condition level 1: when all (a), (b) and (c) are available	3
4.3 Condition level 2: when (a) is available but (b) and/or (c) is unavailable	3
4.4 Condition level 3: none of (a), (b) nor (c) is available	3
4.5 Distinction between biobased carbon content and biobased mass content	3
4.6 Principle of determination of the biobased content by analyses	3
4.7 Outline of analyses and separation procedures for the determination of biobased contents	3
5 Calculation methods for biobased content	4
5.1 Constituents of a rubber product	4
5.2 Biobased mass content	5
5.2.1 Biobased mass content when the biobased constituents are derived wholly from biomass	5
5.2.2 Biobased mass content when the biobased constituents are derived partly from biomass	6
5.3 Biobased carbon content	7
5.3.1 Biobased carbon content when the biobased constituents are derived wholly from biomass	7
5.3.2 Biobased carbon content when the biobased constituents are derived partly from biomass	7
6 Test report	8
Annex A (informative) Difference between "biobased carbon content" and "biobased mass content"	9
Annex B (informative) Mechanism of ¹⁴ C insertion into biobased products	10
Annex C (informative) Examples for calculation of biobased mass content and biobased carbon content	11
Annex D (informative) Classification of constituents for rubber products	14
Bibliography	15