DIN EN ISO 3262-20:2021-07 (E)

Extenders - Specifications and methods of test - Part 20: Fumed silica (ISO 3262-20:2021)

Contents

Page

European foreword 4

Foreword 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Requirements and test methods 7

5 Sampling 7

6 Determination of silica content 7
6.1 Principle 7
6.2 Reagents 8
6.3 Apparatus 8
6.4 Procedure 8
6.4.1 Number of determinations 8
6.4.2 Test portion 8
6.4.3 Determination 8
6.5 Expression of results 9
6.6 Precision 9

7 Determination of aluminium oxide, titanium (IV) oxide and iron (III) oxide contents by spectrometry 9
7.1 Principle 9
7.2 Reagents and materials 9
7.3 Apparatus 10
7.4 Procedure 11
7.4.1 Preparation of standard matching solutions 11
7.4.2 Spectrometric measurement 11
7.4.3 Calibration graph 12
7.4.4 Preparation of the test solution 12
7.4.5 Determination of aluminium, titanium and iron 12
7.4.6 Determination of the total loss on ignition 12
7.5 Expression of results 13
7.5.1 Calculation of the concentration of each element 13
7.5.2 Calculation of the oxide content for each element 13
7.6 Precision 14

8 Determination of carbon content 14
8.1 Principle 14
8.2 Reagents and materials 14
8.3 Apparatus 15
8.4 Procedure 15
8.4.1 Preparation of apparatus 15
8.4.2 Calibration 15
8.4.3 Determination 15
8.5 Expression of results 15

8.6 Precision 16

9 Determination of chloride content 16
9.1 Principle 16
9.2 Reagents 16
9.3 Apparatus 16
9.4 Procedure 17
9.4.1 Number of determinations 17
9.4.2 Test portion 17
9.4.3 Determination 17
9.5 Expression of results 17
9.6 Precision 18

10 Test report 18