ISO 2597-2:2015-11 (E)

Iron ores - Determination of total iron content - Part 2: Titrimetric methods after titanium(III) chloride reduction

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Principle 1
3.1 Decomposition of the test portion 1
3.1.1 Acid decomposition 1
3.1.2 Fusion-filtration 2
3.2 Titration of iron 2

4 Reagents 2

5 Apparatus 3

6 Sampling and samples 4
6.1 Laboratory sample 4
6.2 Preparation of test samples 4
6.2.1 General 4
6.2.2 Ores having significant contents of combined water or oxidizable compounds 4
6.2.3 Ores outside the scope of 6.2.2 4

7 Procedure 5
7.1 Number of determinations 5
7.2 Blank test and check test 5
7.3 Determination of hygroscopic moisture content 5
7.4 Test portion 5
7.5 Determination 5
7.5.1 Decomposition of the test portion 5
7.5.2 Reduction 7

8 Expression of results 8
8.1 Calculation of total iron content 8
8.2 General treatment of results 8
8.2.1 Repeatability and permissible tolerance 8
8.2.2 Determination of analytical result 9
8.2.3 Between-laboratories precision 9
8.2.4 Check for trueness 9
8.2.5 Calculation of final result 10
8.3 Oxide factors 10

9 Test report 10

Annex A (normative) Flowsheet of the procedure for the acceptance of analytical values for test samples 12

Annex B (normative) Procedure of Japanese weighing method 13

Bibliography 14