ISO 10203:2015-07 (E)

Iron ores - Determination of calcium - Flame atomic absorption spectrometric method

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Principle 1

4 Reagents 1

5 Apparatus 2

6 Sampling and samples 3
6.1 Laboratory sample 3
6.2 Preparation of predried test samples 3

7 Procedure 4
7.1 Number of determinations 4
7.2 Test portion 4
7.3 Blank test and check test 4
7.3.1 Blank test 4
7.3.2 Check test 4
7.4 Determination 5
7.4.1 Decomposition of the test portion 5
7.4.2 Treatment of the residue 5
7.4.3 Preparation of the test solution 5
7.4.4 Adjustment of the atomic absorption spectrometer 6
7.4.5 Atomic absorption measurements 6

8 Expression of results 7
8.1 Calculation of mass fraction of calcium 7
8.2 General treatment of results 7
8.2.1 Repeatability and permissible tolerance 7
8.2.2 Determination of analytical result 8
8.2.3 Between-laboratories precision 8
8.2.4 Check for trueness 8
8.2.5 Calculation of final result 9
8.3 Oxide factor 9

9 Test report 9

Annex A (normative) Flowsheet of the procedure for the acceptance of analytical values for test samples 10

Annex B (informative) Derivation of repeatability and permissible tolerance equations 11

Annex C (informative) Precision data obtained by international analytical trials 12

Bibliography 13