# ISO 22682:2017-08 (E)

## Iron ores - Determination of trace elements - Plasma spectrometric method

## Contents

Page


Foreword ..... iv

1 Scope ..... 1

2 Normative references ..... 1

3 Termsanddefinitions ..... 2

4 Principle ..... 2

5 Reagents ..... 2

6 Apparatus ..... 4

7 Sampling and samples ..... 4
7.1 Laboratory sample ..... 4
7.2 Preparation of predried test samples ..... 5

8 Procedure ..... 5
8.1 Number of determinations ..... 5
8.2 Test portion ..... 5
8.3 Blank test and check test ..... 5
8.4 Determination ..... 5
8.4.1 Decomposition of the test portion ..... 5
8.4.2 Adjustment of spectrometer ..... 6

9 Calculation of results ..... 7
9.1 Calibration graph ..... 7
9.2 Correction of spectral interference ..... 8
9.3 Standardization of calibration graph (drift correction) ..... 9
9.4 General treatment of results ..... 10
9.4.1 Repeatability and permissible tolerances ..... 10
9.4.2 Determination of analytical result ..... 10
9.4.3 Check for trueness ..... 11
9.4.4 Calculation of final result ..... 12
9.5 Oxide factors ..... 12

10 Test report ..... 12

Annex A (informative) Suggested calibration solutions ..... 14

Annex B (normative) Plasma spectrometer performance tests ..... 15

Annex C (normative) Flowchart of the procedure for the acceptance of analytical values of test samples ..... 18

Annex D (informative) Derivation of repeatability and permissible tolerance formulae ..... 19

Annex E (informative) Precision data obtained by international analytical trials ..... 20

Bibliography ..... 25