

# ISO/TR 16043:2015-10 (E)

## Iron ores - Determination of chlorine content - X-ray fluorescence spectrometric method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Principle .....	1
3	Reagents and materials .....	1
4	Apparatus .....	2
5	Sampling and samples .....	3
5.1	Laboratory sample .....	3
5.2	Preparation of test sample .....	3
5.2.1	Preparation of pre-dried test samples .....	3
5.2.2	Ores having significant contents of combined water or oxidizable compounds .....	4
6	Procedure .....	4
6.1	Preparation of discs .....	4
6.1.1	General .....	4
6.1.2	Weighing .....	4
6.1.3	Mixing .....	5
6.1.4	Fusion .....	5
6.1.5	Casting .....	5
6.1.6	Calibration discs .....	5
6.1.7	Test discs .....	6
6.1.8	Visual inspection .....	6
6.1.9	Disc storage .....	6
6.1.10	Cleaning of platinum ware .....	6
6.2	Measurements .....	7
6.2.1	General .....	7
6.2.2	Analytical lines .....	7
6.2.3	XRF generator settings .....	7
6.2.4	Crystals .....	7
6.2.5	Counting times .....	7
6.2.6	Collimators .....	8
6.2.7	Simultaneous-type instruments .....	8
6.2.8	Sample holders .....	8
6.2.9	Subsequent determinations .....	8
7	Calculation of results .....	8
7.1	General .....	8
7.2	Correction for background .....	9
7.3	Calibration .....	9
8	General treatment of results .....	10
8.1	Acceptability of background equivalent concentration (BEC) .....	10
8.2	Repeatability and permissible tolerances .....	10
8.3	Determination of analytical result .....	11
8.3.1	Mean of duplicates .....	11

8.3.2	Between-laboratories precision .....	11
8.4	Check for trueness .....	11
8.5	Calculation of final result .....	12
8.6	Oxide factor .....	12
9	Test report .....	12
Annex A (informative) Preparation of flux A .....		13
Annex B (informative) Preparation of flux B .....		15
Annex C (informative) Flowsheet of the procedure for the acceptance of analytical values for test samples .....		16
Annex D (informative) Derivation of repeatability and permissible tolerance .....		17
Bibliography .....		18