

# ISO 10203:2006-06 (E)

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

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Principle .....</b>	<b>1</b>
<b>4</b>	<b>Reagents .....</b>	<b>2</b>
<b>5</b>	<b>Apparatus .....</b>	<b>3</b>
<b>6</b>	<b>Sampling and samples .....</b>	<b>3</b>
6.1	Laboratory sample .....	3
6.2	Preparation of predried test samples .....	3
<b>7</b>	<b>Procedure .....</b>	<b>4</b>
7.1	Number of determinations .....	4
7.2	Test portion .....	4
7.3	Blank test and check test .....	4
7.4	Determination .....	4
7.4.1	Decomposition of the test portion .....	4
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 .....	5
7.4.5	Atomic absorption measurements .....	6
<b>8</b>	<b>Expression of results .....</b>	<b>6</b>
8.1	Calculation of mass fraction of calcium .....	6
8.2	General treatment of results .....	6
8.2.1	Repeatability and permissible tolerance .....	6
8.2.2	Determination of analytical result .....	7
8.2.3	Between-laboratories precision .....	7
8.2.4	Check for trueness .....	7
8.2.5	Calculation of final result .....	8
8.3	Oxide factor .....	8
<b>9</b>	<b>Test report .....</b>	<b>9</b>
<b>Annex A (normative) Flowsheet of the procedure for the acceptance of analytical values for test samples .....</b>		<b>10</b>
<b>Annex B (informative) Derivation of repeatability and permissible tolerance equations .....</b>		<b>11</b>
<b>Annex C (informative) Precision data obtained by international analytical trials .....</b>		<b>12</b>