

ISO 15202-3:2004-11 (E)

Workplace air - Determination of metals and metalloids in airborne particulate matter by inductively coupled plasma atomic emission spectrometry - Part 3: Analysis

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	2
3	Terms, definitions and abbreviated terms	2
3.1	General definitions	2
3.2	Analytical definitions	3
3.3	ICP-AES definitions	4
3.4	Statistical terms	7
4	Principle	8
5	Requirements	8
6	Reagents	8
7	Laboratory apparatus	12
8	Procedure	13
8.1	Method development	13
8.2	Instrument performance checks	18
8.3	Routine analysis	18
8.4	Estimation of detection and quantification limits	19
8.5	Quality control	20
8.6	Measurement uncertainty	21
9	Expression of results	21
10	Method performance	22
10.1	Method detection limits and quantification limits	22
10.2	Upper limits of the analytical range	23
10.3	Bias and precision	23
10.4	Overall uncertainty of sampling and analysis methods	23
10.5	Spectral interferences	24
11	Test report	24
11.1	Test records	24
11.2	Laboratory report	25
Annex A (informative) Guidance on maintenance of ICP-AES instrumentation		26
Annex B (informative) Examples of performance checks and fault diagnostics		28
Annex C (informative) Procedure for quality control and identification (QUID) of malfunctions of inductively coupled plasma atomic emission spectrometers		29
Annex D (informative) Recalculation of metal and metalloid in air concentrations to reference conditions		35
Bibliography		36