

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	2
3 Terms, definitions and symbols	3
3.1 Terms and definitions	3
3.2 Symbols	6
4 Principle	6
5 Interferences	7
5.1 General	7
5.2 Spectral interferences	8
5.2.1 General	8
5.2.2 Isobaric elemental	9
5.2.3 Polyatomic interferences	9
5.3 Non-spectral interferences	9
6 Reagents	10
7 Apparatus	14
8 Sampling	15
9 Sample pre-treatment	15
9.1 Determination of the mass concentration of dissolved elements without digestion	15
9.2 Determination of the total mass concentration after digestion	16
10 Procedure	16
10.1 General	16
10.2 Calibration of the ICP-MS system	17
10.3 Measurement of the matrix solution for evaluation of the correction factors	17
10.4 Measurement of the samples	17
11 Calculation	17
12 Test report	18
Annex A (normative) Determination of the mass concentration of uranium isotopes	19
Annex B (informative) Description of the matrices of the samples used for the interlaboratory trial	28
Annex C (informative) Performance data	31
Bibliography	34