

ISO 16638-2:2019-11 (E)

Radiological protection - Monitoring and internal dosimetry for specific materials - Part 2: Ingestion of uranium compounds

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Symbols and abbreviated terms	4
4.1 Symbols	4
4.2 Abbreviated terms	5
5 Purpose and need for monitoring programmes	5
6 General aspects	7
7 Special monitoring programmes	8
8 Task-related monitoring programmes for individual monitoring	8
9 Reference values as performance criteria for laboratories	8
10 Quality assurance and quality control for bioassay laboratories	9
11 Procedure for the assessment of exposures	10
11.1 Assessment of individual monitoring data	10
11.2 Properties of a software tool	10
11.3 Uncertainties	11
11.4 Quality assurance of the assessment process	11
12 Reporting and documentation	12
12.1 Reporting results for in vitro measurements	12
12.2 Documentation of the dose assessment	12
Annex A (informative) Nuclear data of U-238 and U-235 decay	14
Annex B (informative) Default classification of uranium compounds	15
Annex C (informative) Measurement techniques for uranium in case of ingestion	16
Annex D (informative) Excretion rates for ingestion of uranium compounds	19
Annex E (informative) Committed effective dose per unit intake after ingestion of uranium compounds	21
Annex F (informative) Estimation of uncertainties for internal dose assessments after ingestion Bibliography	22 25