

DIN EN ISO 13165-3:2025-05 (E)

Water quality - Radium-226 - Part 3: Test method using coprecipitation and gamma-ray spectrometry (ISO 13165-3:2024)

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		2
4 Symbols		2
5 Principle		3
6 Reagents and equipment		4
6.1 Reagents.....		4
6.2 Equipment.....		4
7 Sampling		5
7.1 General.....		5
7.2 Sample collection.....		5
7.3 Sample transportation and storage.....		5
8 Procedure		5
8.1 Blank sample preparation.....		5
8.2 Sample preparation.....		5
8.3 Counting procedure.....		6
9 Quality assurance and quality control programme		6
9.1 General.....		6
9.2 Interferences.....		6
9.3 Method verification.....		7
9.4 Demonstration of analyst capability.....		7
10 Expression of results		7
10.1 General.....		7
10.2 Water-soluble ²²⁶ Ra activity concentration.....		7
10.3 Standard uncertainty of activity concentration.....		8
10.4 Decision threshold.....		8
10.5 Detection limit.....		9
10.6 Limits of the coverage intervals.....		9
10.6.1 Limits of the probabilistically symmetric coverage interval.....		9
10.6.2 Shortest coverage interval.....		10
10.7 Corrections for contributions from other radionuclides and background.....		10
10.7.1 General.....		10
10.7.2 Contribution from other radionuclides.....		10
10.7.3 Contribution from background.....		11
11 Test report		12
Annex A (informative) Uranium-238 decay chain		14
Bibliography		15