

# ISO 9697:2015-04 (E)

## Water quality - Gross beta activity in non-saline water - Test method using thick source

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Symbols, definitions, and units .....	2
4	Principle .....	3
5	Reagents and equipment .....	3
5.1	Reagents .....	3
5.2	Equipment .....	3
6	Procedure .....	4
6.1	Sampling .....	4
6.2	Pretreatment .....	4
6.3	Concentration stage .....	4
6.4	Sulfation stage .....	5
6.5	Ignition stage .....	5
6.6	Source preparation .....	5
6.7	Measurement .....	5
6.8	Determination of counting background .....	6
6.9	Preparation of calibration sources .....	6
6.10	Sensitivity and bias .....	6
6.11	Optimization of the determination .....	6
7	Source control .....	7
7.1	Contamination check .....	7
7.2	Potential disequilibrium of radionuclides .....	7
8	Expression of results .....	7
8.1	Calculation of activity concentration .....	7
8.2	Standard uncertainty .....	8
8.3	Decision threshold .....	9
8.4	Detection limit .....	9
8.5	Confidence limits .....	9
9	Test report .....	10
Annex A (informative) Example of performance criteria .....		11
Bibliography .....		12