

# ISO 22125-1:2019-11 (E)

## Water quality - Technetium-99 - Part 1: Test method using liquid scintillation counting

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms, definitions and symbols .....	2
4	Principle .....	3
5	Sampling and storage .....	4
6	Procedure .....	4
6.1	Sample preparation for measurement .....	4
6.2	Sample measurement .....	5
7	Quality assurance and quality control program .....	5
7.1	General .....	5
7.2	Variables that could influence the measurement .....	5
7.3	Instrument verification .....	5
7.4	Contamination .....	5
7.5	Interference control .....	5
7.6	Method verification .....	5
7.7	Demonstration of analyst capability .....	6
7.8	Sample measurement .....	6
8	Expression of results .....	6
8.1	Sample activity, recovery and uncertainties .....	6
8.2	Decision threshold .....	8
8.3	Detection limit .....	9
8.4	Confidence interval limits .....	9
8.5	Calculation using the activity per unit of volume .....	9
8.6	Conversion of activity concentration to mass concentration .....	10
8.7	Conversion of mass concentration to volume unit .....	10
9	Test report .....	10
Annex A (informative) Method 1 -- TEVA resin .....		12
Annex B (informative) Method 2 -- TRU resin .....		15
Annex C (informative) Method 3 -- Anion exchange resin .....		18
Bibliography .....		20