

DIN EN ISO 11704:2015-11 (E)

Water quality - Measurement of gross alpha and beta activity concentration in non-saline water - Liquid scintillation counting method (ISO 11704:2010)

| Contents | | Page |
|-----------------|---|-------------|
| | | 3 |
| 1 | Scope | 4 |
| 2 | Normative references | 4 |
| 3 | Symbols, definitions and units | 5 |
| 4 | Principle | 5 |
| 5 | Reagents and equipment | 6 |
| 6 | Sampling | 7 |
| 7 | Procedure | 7 |
| 7.1 | Direct counting | 7 |
| 7.2 | Thermal preconcentration | 8 |
| 7.3 | Sample preparation | 8 |
| 7.4 | Liquid scintillation measurement | 8 |
| 8 | Expression of results | 10 |
| 8.1 | Calculation of activity per unit of mass | 10 |
| 8.2 | Standard uncertainty | 11 |
| 8.3 | Decision threshold | 11 |
| 8.4 | Detection limit | 12 |
| 8.5 | Confidence limits | 12 |
| 8.6 | Quality control | 13 |
| 9 | Interference control | 13 |
| 9.1 | Contamination | 13 |
| 9.2 | Ingrowth of radon | 13 |
| 9.3 | Loss of polonium | 13 |
| 10 | Test report | 13 |
| | Bibliography | 15 |
| | European foreword | 15 |