

# ISO 15192:2025-09 (E)

## Soil and waste - Determination of chromium(VI) in solid material by alkaline digestion and ion chromatography with spectrophotometric detection

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Safety remarks .....	1
5	Principle .....	2
5.1	Digestion .....	2
5.2	Determination .....	2
5.3	Interferences and sources of error .....	2
6	Apparatus .....	3
7	Reagents .....	3
8	Sample pretreatment .....	6
9	Alkaline digestion procedure .....	6
9.1	General .....	6
9.2	Preparation of test solutions using a hotplate or heating block .....	6
10	Analytical procedure .....	7
10.1	General information .....	7
10.2	Instrumental set-up .....	7
10.3	Calibration .....	7
10.4	Test solution measurement .....	7
10.5	Quality control .....	8
10.5.1	General .....	8
10.5.2	Blank test solution .....	8
10.5.3	Verification of method .....	8
10.5.4	Duplicate samples .....	8
10.5.5	Soluble Cr(VI) spiked samples .....	8
10.5.6	Cr(III) spiked samples .....	9
10.5.7	Interpretation of quality control data .....	9
11	Calculation .....	9
12	Expression of results .....	10
13	Test report .....	10
Annex A (informative) Ion chromatographic system .....		11
Annex B (informative) Requirements for test portion preparation .....		13
Annex C (informative) Validation .....		14
Annex D (informative) Background on methods for the determination of Cr(VI) in solid samples .....		19
Bibliography .....		23