DIN EN ISO 15192:2026-07 (E)

Soil and waste - Determination of chromium(VI) in solid material by alkaline digestion and ion chromatography with spectrophotometric detection (ISO 15192:2025)

Contents

Page

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**