

DIN EN 196-10:2016-11 (E)

Methods of testing cement - Part 10: Determination of the water-soluble chromium (VI) content of cement

Contents	Page
European foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 General requirements for testing	6
3.1 Number of tests	6
3.2 Repeatability and reproducibility	6
3.3 Expression of masses, volumes, factors and results	6
3.4 Blank determinations	6
4 Reagents	6
5 Apparatus	7
6 Preparation of a test sample of cement	8
7 Extraction procedure	9
7.1 Principle	9
7.2 Preparation of mortar	9
7.3 Filtration	10
8 Determination of chromium (VI)	10
8.1 General	10
8.2 Measurement of absorbance without oxidation	10
8.3 Measurement of absorbance with oxidation	11
9 Calculation and expression of results	12
9.1 Calculation	12
9.2 Expression of results	13
10 Reporting of results	13
11 Repeatability and reproducibility	13
Annex A (normative) Evaluation of the compliance of cement with the regulatory limit in 47 to Annex XVII of Regulation (EC) No. 1907/2006 on water-soluble hexavalent chromium content	14
Annex B (informative) Guidance on the application of this European Standard to the determination of the water soluble chromium (VI) content of cement-containing preparations	24
Annex C (informative) Guidance on screening test method (1) using paste extraction - method based on DS 1020	26
Annex D (informative) Guidance on screening test method (2) using paste extraction - method based on TRGS 613	29

Annex E (informative) Guidance on the photometric determination of chromium reduction capacity in cements	33
Bibliography	37