



Designation: C 114 – 00

Standard Test Methods for Chemical Analysis of Hydraulic Cement¹

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1. Scope

1.1 These test methods cover the chemical analyses of hydraulic cements. Any test methods of demonstrated acceptable precision and bias may be used for analysis of hydraulic cements, including analyses for referee and certification purposes, as explained in Section 3. Specific chemical test methods are provided for ease of reference for those desiring to use them. They are grouped as Reference Test Methods and Alternative Test Methods. The reference test methods are long accepted wet chemical test methods which provide a reasonably well-integrated basic scheme of analysis for hydraulic cements. The alternative test methods generally provide individual determination of specific components and may be used alone or as alternates and determinations within the basic scheme at the option of the analyst and as indicated in the individual method.

1.2 Contents:

Section	Subject
2	Referenced Documents
3	Number of Determinations and Permissible Variations
3.1	Referee Analyses
3.2	Optional Analyses
3.3	Performance Requirements for Rapid Test Methods
3.4	Precision and Bias
4	General
4.1	Interferences and Limitations
4.2	Apparatus and Materials
4.3	Reagents
4.4	Sample Preparation
4.5	General Procedures
4.6	Recommended Order for Reporting Analyses
	Reference Test Methods
5	Insoluble Residue
6	Silicon Dioxide
6.2	Cements with Insoluble Residue Less Than 1 %
6.3	Cements with Insoluble Residue Greater Than 1 %
7	Ammonium Hydroxide Group
8	Ferric Oxide
9	Phosphorus Pentoxide
10	Titanium Dioxide
11	Zinc Oxide
12	Aluminum Oxide
13	Calcium Oxide
14	Magnesium Oxide
15	Sulfur

15.1	Sulfur Trioxide
15.2	Sulfide
16	Loss On Ignition
16.1	Portland Cement
16.2	Portland Blast-Furnace Slag Cement and Slag Cement
17	Sodium and Potassium Oxides
17.1	Total Alkalis
17.2	Water-Soluble Alkalis
18	Manganic Oxide
19	Chloride
20	Chloroform-Soluble Organic Substances
	Alternative Test Methods
21	Calcium Oxide
22	Magnesium Oxide
23	Loss on Ignition
23.1	Portland Blast-Furnace Slag Cement and Slag Cement
24	Titanium Dioxide
25	Phosphorus Pentoxide
26	Manganic Oxide
27	Free Calcium Oxide
Appendices	Title
Appendix X1	Example of Determination of Equivalence Point for the Chloride Determination
Appendix X2	CO ₂ Determinations in Hydraulic Cements

1.3 The values stated in SI units are to be regarded as the standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* See 6.3.2.1 and Note 43 for specific caution statements.

2. Referenced Documents

2.1 ASTM Standards:

- C 25 Standard Test Methods for Chemical Analysis of Limestone, Quicklime, and Hydrated Lime²
- C 115 Test Method for Fineness of Portland Cement by the Turbidimeter²
- C 150 Specification for Portland Cement²
- C 183 Practice for Sampling and the Amount of Testing of Hydraulic Cement²
- C 595 Specification for Blended Hydraulic Cements²
- D 1193 Specification for Reagent Water³
- E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁴

¹ These test methods are under the jurisdiction of ASTM Committee C01 on Cement and are the direct responsibility of Subcommittee C01.23 on Compositional Analysis.

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² Annual Book of ASTM Standards, Vol 04.01.

³ Annual Book of ASTM Standards, Vol 11.01.

⁴ Annual Book of ASTM Standards, Vol 14.02.