

Designation: D1614-03 Designation: D1614-08

Standard Test Method for Alkalinity in Acetone¹

This standard is issued under the fixed designation D 1614; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

- 1.1 This test method covers the determination in acetone of alkalinity calculated as ammonia (NH₂).
- 1.
- 1.2 For specific hazard information and guidance, consult the supplier's Material Safety Data Sheet.
- 1.3 The following applies to all specified limits in this standard; for purposes of determining conformance with this standard, an observed value or a calculated value shall be rounded off "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E 29.
 - 1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.
- 1.5 This standard does not purport to address the safety concerns, if any, associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Specific hazard statements are given in Section 7.
 - 1.3 For specific hazard information and guidance, consult the supplier's Material Safety Data Sheet.
- 1.4The following applies to all specified limits in this standard; for purposes of determining conformance with this standard, an observed value or a calculated value shall be rounded off "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E29.

2. Referenced Documents

- 2.1 ASTM Standards:²
- D 1193 Specification for Reagent Water
- E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E 200 Practice for Preparation, Standardization, and Storage of Standard and Reagent Solutions for Chemical Analysis

3. Summary of Test Method

3.1 The specimen is added to water previously neutralized to the methyl red end point. If alkalinity is detected, it is titrated with $0.05\ N\ H_2SO_4$ and reported as weight percent of NH $_3$.

4. Significance and Use

4.1 This test method provides a measurement of alkalinity in acetone. The results of this measurement can be used for specification acceptance.

5. Apparatus

- 5.1 Buret, 10-mL, graduated in 0.05-mL subdivisions.
- 5.2 Erlenmeyer Flask, 250-mL capacity.

6. Reagents and Materials

6.1 Purity of Reagents—Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that all reagents shall conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where

¹ This test method is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.35 on Solvents, Plasticizers, and Chemical Intermediates .

Current edition approved July 10, 2003. Published August 2003. Originally approved in 1958. Last previous edition approved in 1995 as D1614-95(1999).

Current edition approved Nov. 1, 2008. Published November 2008. Originally approved in 1958. Last previous edition approved in 2003 as D 1614 – 03.

Annual Book of ASTM Standards, Vol 11.01.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.