



Designation: D304-05

~~Standard Specification for~~ Designation: D304 – 11

Standard Specification for *n*-Butyl Alcohol (Butanol)¹

This standard is issued under the fixed designation D304; 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 specification covers *n*-butyl alcohol (butanol).
- 1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.
- 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 E29.
- 1.4 For hazard information and guidance, see the supplier’s Material Safety Data Sheets.

2. Referenced Documents

2.1 *ASTM Standards:*²

- D268 [Guide for Sampling and Testing Volatile Solvents and Chemical Intermediates for Use in Paint and Related Coatings and Material](#)
 - D891 [Test Methods for Specific Gravity, Apparent, of Liquid Industrial Chemicals](#)
 - D1078 [Test Method for Distillation Range of Volatile Organic Liquids](#)
 - D1209 [Test Method for Color of Clear Liquids \(Platinum-Cobalt Scale\)](#)
 - D1353 [Test Method for Nonvolatile Matter in Volatile Solvents for Use in Paint, Varnish, Lacquer, and Related Products](#)
 - D1364 [Test Method for Water in Volatile Solvents \(Karl Fischer Reagent Titration Method\)](#)
 - D1476 [Test Method for Heptane Miscibility of Lacquer Solvents](#)
 - D1613 [Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products](#)
 - D4052 [Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter](#)
 - D5386 [Test Method for Color of Liquids Using Tristimulus Colorimetry](#)
 - E1 [Specification for ASTM Liquid-in-Glass Thermometers](#)
 - E29 [Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications](#)
 - E300 [Practice for Sampling Industrial Chemicals](#)
- ##### 2.2 *U.S. Federal Specification:*
- PPP-C-2020 [Chemicals, Liquid, Dry, and Paste: Packaging of](#)³

3. Properties

- 3.1 *n*-butyl alcohol (butanol) shall conform to the following requirements:

Apparent specific gravity:
20/20°C

0.810 to 0.813

¹ This specification is under the jurisdiction of the 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 May 15, 2005. Published May 2005. Originally approved in 1929. Last previous edition approved in 1999 as D304-95(1999). DOI: 10.1520/D0304-05.~~

Current edition approved Nov. 1, 2011. Published December 2011. Originally approved in 1929. Last previous edition approved in 2005 as D304-05. DOI: 10.1520/D0304-11.

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.

³ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://www.dodssp.daps.mil>.

*A Summary of Changes section appears at the end of this standard.