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Standard Specification for Refined Benzene-545¹

This standard is issued under the fixed designation D 4734; 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.

1. Scope*

1.1 This specification covers benzene-545.

1.2 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 in Practice E 29.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 Consult current OSHA regulations, supplier’s Material Safety Data Sheets, and local regulations for all materials used in this specification.

2. Referenced Documents

2.1 *ASTM Standards:*²

D 848 [Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons](#)

D 852 [Test Method for Solidification Point of Benzene](#)

D 1209 [Test Method for Color of Clear Liquids \(Platinum-Cobalt Scale\)](#)

D 1492 [Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration](#)

D 1685 [Test Method for Traces of Thiophene in Benzene by Spectrophotometry](#)

D 3437 [Practice for Sampling and Handling Liquid Cyclic Products](#)

D 4492 [Test Method for Analysis of Benzene by Gas Chromatography](#)

D 4735 [Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography](#)

D 5386 [Test Method for Color of Liquids Using Tristimulus Colorimetry](#)

D 5776 [Test Method for Bromine Index of Aromatic Hydrocarbons by Electrometric Titration](#)

D 6069 [Test Method for Trace Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection](#)

D 6304 [Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration](#)

D 6875 [Test Method for Solidification Point of Industrial Organic Chemicals by Thermistor](#)

D 7011 [Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography and Sulfur Selective Detection](#)

D 7183 [Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultraviolet Fluorescence](#)

D 7184 [Test Method for Ultra Low Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection](#)

[D 7375 Test Method for Trace Quantities of Water in Aromatic Hydrocarbons and Their Mixtures by Coulometric Karl Fischer Titration](#)

E 29 [Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications](#)

E 1064 [Test Method for Water in Organic Liquids by Coulometric Karl Fischer Titration](#)

2.2 *Other Document:*

OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200³

¹ This specification is under the jurisdiction of ASTM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.01 on Benzene, Toluene, Xylenes, Cyclohexane and Their Derivatives.

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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 U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, http://www.access.gpo.gov.

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