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Standard Specification for Benzene for Use with Zeolite Based Catalysts¹

This standard is issued under the fixed designation D7124; 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 for use with zeolite based catalysts.

1.2 The following applies to all specified limits in this specification: for purposes of determining conformance with this specification, 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.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

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

- D848 Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons
- D1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)
- D1492 Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration
- D1685 Test Method for Traces of Thiophene in Benzene by Spectrophotometry (Withdrawn 2009)³
- D3437 Practice for Sampling and Handling Liquid Cyclic Products
- D4492 Test Method for Analysis of Benzene by Gas Chromatography

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 The last approved version of this historical standard is referenced on www.astm.org.

- D4735 Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography
- D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry
- D5776 Test Method for Bromine Index of Aromatic Hydrocarbons by Electrometric Titration
- D6069 Test Method for Trace Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection
- D6304 Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration
- D7011 Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography and Sulfur Selective Detection
- D7183 Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultraviolet Fluorescence
- D7184 Test Method for Ultra Low Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection
- D7359 Test Method for Total Fluorine, Chlorine and Sulfur in Aromatic Hydrocarbons and Their Mixtures by Oxidative Pyrohydrolytic Combustion followed by Ion Chromatography Detection (Combustion Ion Chromatography-CIC)
- D7360 Test Method for Analysis of Benzene by Gas Chromatography with External Calibration
- D7375 Test Method for Trace Quantities of Water in Aromatic Hydrocarbons and Their Mixtures by Coulometric Karl Fischer Titration
- D7457 Test Method for Determining Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry
- D7504 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography and Effective Carbon Number
- D7536 Test Method for Chlorine in Aromatics by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry
- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E1064 Test Method for Water in Organic Liquids by Coulometric Karl Fischer Titration

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