



Designation: **D5871—11 D5871 – 12**

Standard Specification for Benzene for Cyclohexane Feedstock¹

This standard is issued under the fixed designation D5871; 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 cyclohexane feedstock.
- 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 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 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](#)
- [D852 Test Method for Solidification Point of Benzene](#)
- [D1209 Test Method for Color of Clear Liquids \(Platinum-Cobalt Scale\)](#)
- [D1685 Test Method for Traces of Thiophene in Benzene by Spectrophotometry \(Withdrawn 2009\)³](#)
- [D3437 Practice for Sampling and Handling Liquid Cyclic Products](#)
- [D4017 Test Method for Water in Paints and Paint Materials by Karl Fischer Method](#)
- [D4492 Test Method for Analysis of Benzene by Gas Chromatography](#)
- [D4735 Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography](#)
- [D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry](#)
- [D5713 Test Method for Analysis of High Purity Benzene for Cyclohexane Feedstock by Capillary Gas Chromatography](#)
- [D6875 Test Method for Solidification Point of Industrial Organic Chemicals by Thermistor](#)
- [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](#)
- [D7375 Test Method for Trace Quantities of Water in Aromatic Hydrocarbons and Their Mixtures by Coulometric Karl Fischer Titration](#)
- [D7504 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography and Effective Carbon Number](#)
- [E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications](#)

2.2 *Other Document:*

- [OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200⁴](#)

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.

⁴ 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