



Designation: D843 – 17

Standard Specification for Nitration Grade Xylene¹

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1. Scope

1.1 This specification covers nitration grade xylene.

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 round off “to the nearest unit” in the last right-hand digit used in expressing the specification limit, in accordance with the round-off method of Practice E29.

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

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

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

- D848 Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons
- D849 Test Method for Copper Strip Corrosion by Industrial Aromatic Hydrocarbons
- D850 Test Method for Distillation of Industrial Aromatic Hydrocarbons and Related Materials
- D3437 Practice for Sampling and Handling Liquid Cyclic Products

- D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry
- D6563 Test Method for Benzene, Toluene, Xylene (BTX) Concentrates Analysis by Gas Chromatography
- D8005 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)
- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E2680 Test Method for Appearance of Clear, Transparent Liquids (Visual Inspection Procedure)

2.2 *Other Document:*

- OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200³

3. Properties

3.1 Nitration grade xylene shall conform to the following requirements:

Property	Specification	ASTM Test Method ⁴
Nonaromatic hydrocarbons, max, volume %	4.0	D6563
Acid wash color, max	pass with 6	D848
Copper corrosion	pass (1A or 1B)	D849
Appearance, free of haze, particulates or suspended matter particles	pass	E2680
Color, Pt/Co scale, max	20	D5386 or D8005
Distillation range at 101.3 kPa (760 mm Hg pressure), max, °C	5	D850
Initial distillation temperature, min, °C	137	D850
Dry point, max, °C	143	D850

⁴ If more than one method is listed, the producer and user should agree on the referee method.

4. Sampling

4.1 The material shall be sampled in accordance with Practice D3437.

5. Keywords

5.1 xylene

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.

¹ This specification is under the jurisdiction of ASTM Committee D16 on Aromatic, Industrial, Specialty 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.