



Designation: D 843 – 97 (Reapproved 2001)

## Standard Specification for Nitration Grade Xylene<sup>1</sup>

This standard is issued under the fixed designation D 843; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 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 E 29.

1.3 Consult 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:*

- D 848 Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons<sup>2</sup>
- D 849 Test Method for Copper for Corrosion of Industrial Aromatic Hydrocarbons<sup>2</sup>
- D 850 Test Method of Distillation of Industrial Aromatic Hydrocarbons and Related Materials<sup>2</sup>
- D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)<sup>2</sup>
- D 2360 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography<sup>2</sup>
- D 3437 Practice for Sampling and Handling Liquid Cyclic Products<sup>2</sup>

<sup>1</sup> 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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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 06.04.

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry<sup>2</sup>

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications<sup>3</sup>

2.2 *Other Document:*

OSHA Regulations 29 CFR, paragraphs 1910.1000 and 1910.1200<sup>4</sup>

### 3. Properties

3.1 Nitration grade xylene shall conform to the following requirements:

Property	Specification	ASTM Test Method
Nonaromatic hydrocarbons, max, volume %	4.0	D 2360
Acid wash color, max	pass with 6	D 848
Copper corrosion Appearance	pass (1A or 1B) <sup>A</sup>	D 849
Color, Pt/Co scale, max	20	D 1209 or D 5386
Distillation range at 101.3 kPa (760 mm Hg pressure), max, ° C	5	D 850
Initial distillation temperature, min, ° C	137	D 850
Dry point, max, ° C	143	D 850

<sup>A</sup> Clear liquid free of sediment and haze when observed at 18.3 to 25.6°C (65 to 78°F).

### 4. Sampling

4.1 The material shall be sampled in accordance with Practice D 3437.

### 5. Keywords

5.1 xylene

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 14.02.

<sup>4</sup> Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.