



Standard Specification for Nitration Grade Xylene^{1,2}

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 (ϵ) 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 Hydrocarbons³

D 849 Test Method for Copper for Corrosion of Industrial Aromatic Hydrocarbons³

D 850 Test Method of Distillation of Industrial Aromatic Hydrocarbons and Related Materials³

D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)³

D 2360 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography³

D 3437 Practice for Sampling and Handling Liquid Cyclic Products³

¹ This specification is under the jurisdiction of ASTM Committee D-16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.0A on BTX, Cyclohexane, and Their Derivatives.

Current edition approved Dec. 10, 1997. Published August 1998. Originally published as D 843 – 45 T. Last previous edition D 843 – 95.

² This material was formerly known as “3° xylol.”

³ Annual Book of ASTM Standards, Vol 06.04.

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry³

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁴

2.2 Other Document:

OSHA Regulations 29 CFR, paragraphs 1910.1000 and 1910.1200⁵

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) ^A	D 849
Color, Pt/Co scale, max	20	...
Distillation range at 101.3 kPa (760 mm Hg pressure), max, ° C	5	D 1209 or D 5386
Initial distillation temperature, min, ° C	137	D 850
Dry point, max, ° C	143	D 850

^AClear 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

⁴ Annual Book of ASTM Standards, Vol 14.02.

⁵ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.