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Designation: D841 – 17a

Standard Specification for Nitration Grade Toluene[1]

This standard is issued under the fixed designation D841; 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 toluene.

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 standard. No other units of measurement are included in this standard.

1.4 Consult current 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

D3437 Practice for Sampling and Handling Liquid Cyclic Products

D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry

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

E2680 Test Method for Appearance of Clear, Transparent Liquids (Visual Inspection Procedure)

2.2 *Federal Specification:*[3]

PPP-C-2020 Packaging of Chemicals, Liquid, Dry, and Paste

2.3 *Other Document:*

OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200 [4]

3. Properties

3.1 Nitration Grade Toluene shall conform to the following requirements:

Property	Specification	ASTM Test Method[A]
Purity, min. wt%	98.8	D7504
Nonaromatic hydrocarbons, max, volume % (wt %)	1.5 (1.2)	D7504
Acid wash color, max	pass with 2	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

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

3.2 See Section 6 for non-mandatory supplementary requirements.

4. Sampling

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

5. Packaging and Labeling for U.S. Government Procurements

5.1 United States Government procurements shall be packaged and labeled in accordance with the applicable paragraphs of Fed. Spec. PPP-C-2020.

[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.

Current edition approved July 1, 2017. Published September 2017. Originally approved in 1945. Last previous edition approved in 2017 as D841 – 17. DOI: 10.1520/D0841-17a.

[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] Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, http://quicksearch.dla.mil.

[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.

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