



Standard Terminology of Aromatic Hydrocarbons and Related Chemicals¹

This standard is issued under the fixed designation D4790; 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. Referenced Documents

1.1 ASTM Standards:²

D835 Specification for Refined Benzene-485 (Withdrawn 1997)³

D841 Specification for Nitration Grade Toluene

D843 Specification for Nitration Grade Xylene

D846 Specification for Ten-Degree Xylene (Withdrawn 1989)³

D847 Test Method for Acidity of Benzene, Toluene, Xylenes, Solvent Naphthas, and Similar Industrial Aromatic Hydrocarbons

D848 Test Method for Acid Wash Color of Industrial Aromatic Hydrocarbons

D1015 Test Method for Freezing Points of High-Purity Hydrocarbons

D1016 Test Method for Purity of Hydrocarbons from Freezing Points

D1129 Terminology Relating to Water

D1298 Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

D1492 Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration

D1840 Test Method for Naphthalene Hydrocarbons in Aviation Turbine Fuels by Ultraviolet Spectrophotometry

D2031 Test Method for Reducing Substances in Refined Pyridine (Withdrawn 2003)³

D2121 Test Methods for Polymer Content of Styrene Monomer and AMS (α -Methylstyrene)

D2147 Method of Test for Detection and Estimation of Water-Insoluble Impurities in Refined Phenol by Cloud

Point Depression (Withdrawn 1979)³

D2269 Test Method for Evaluation of White Mineral Oils by Ultraviolet Absorption

D2279 Method of Test for Acid Wash Color of Refined Naphthalene (Withdrawn 1982)³

D2323 Specification for Refined Pyridine (1 Degree) (Withdrawn 2003)³

D2359 Specification for Refined Benzene-535

D2403 Specification for Refined Phthalic Anhydride-1308 (Withdrawn 2008)³

D2777 Practice for Determination of Precision and Bias of Applicable Test Methods of Committee D19 on Water

D2827 Specification for Styrene Monomer

D2935 Test Method for Apparent Density of Industrial Aromatic Hydrocarbons (Withdrawn 2005)³

D3980 Practice for Interlaboratory Testing of Paint and Related Materials (Withdrawn 1998)³

D4053 Test Method for Benzene in Motor and Aviation Gasoline by Infrared Spectroscopy (Withdrawn 2013)³

D4734 Specification for Refined Benzene-545

E12 Terminology Relating to Density and Specific Gravity of Solids, Liquids, and Gases (Withdrawn 1996)³

2. Terminology

absorbance, n —the logarithm to the base 10 of the reciprocal of the relative transmittance, T , expressed as:

$$A = \log_{10} (1/T) = -\log_{10} T \quad (1)$$

D1840, D2269, D4053, D02

accuracy, n —the agreement between the mean of a series of repeated measurements of a property and the accepted reference value of the property. **D3980, D01**

acidity, n —the number of milligrams of sodium hydroxide consumed when 100 mL of the sample are titrated under the conditions prescribed in this method. **D847, D16**

acid reaction, n —a characteristic of materials producing the acid-color of the indicator used under the conditions prescribed in this method. **D847, D16**

acid wash color, n —the color developed in the separated acid when a sample is agitated with sulfuric acid under the condition prescribed in this method. **D848, D2279, D16**

¹ This terminology is under the jurisdiction of ASTM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.05 on Editorial and Nomenclature.

Current edition approved July 1, 2014. Published August 2014. Originally approved in 1988. Last previous edition approved in 2011 as D4790 – 11. DOI: 10.1520/D4790-14.

The boldface designations refer to the original source of the definition and the ASTM Technical Committee having jurisdiction.

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.