



Designation: D5211 – 07

Standard Specification for Xylenes for *p*-Xylene Feedstock¹

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1. Scope*

1.1 This specification covers xylenes for *p*-xylene feedstock. These xylenes typically are extracted from reformat.

1.2 The following applies to all specified limits in this specification: for purposes of determining conformance with this specification, an observed value or 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. The values given in parentheses are for information only.

1.4 Consult current OSHA regulations, suppliers’ Material Safety Data Sheets (MSDS), and local regulations for all materials used in this specification.

2. Referenced Documents

2.1 ASTM Standards:²

D850 Test Method for Distillation of Industrial Aromatic Hydrocarbons and Related Materials

D1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)

D3437 Practice for Sampling and Handling Liquid Cyclic Products

D5194 Test Method for Trace Chloride in Liquid Aromatic Hydrocarbons

D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry

D5808 Test Method for Determining Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry

D6069 Test Method for Trace Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure

¹ 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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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.

Chemiluminescence Detection

D6563 Test Method for Benzene, Toluene, Xylene (BTX) Concentrates Analysis by Gas Chromatography

D7183 Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultra-violet Fluorescence

D7184 Test Method for Ultra Low Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

2.2 Other Document:

OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200³

3. Properties

3.1 Xylenes for *p*-xylene feedstock shall conform to the following requirements:

Property	Specification	ASTM Test Method
<i>p</i> -xylene, ^A min, weight %	18	D6563
Ethylbenzene, ^A max, weight %	20	D6563
Toluene, max, weight %	0.5	D6563
C9 and higher boiling aromatic hydrocarbons, max, weight %	1.0	D6563
Nonaromatic hydrocarbons, max, weight %	0.3	D6563
Nitrogen, max, mg/kg	if needed	D6069 or D7184
Sulfur, max, mg/kg	1.0	D7183
Appearance	^B	...
Chloride	if needed	D5194 or D5808
Color, max, Pt/Co scale	20	D1209 or D5386
Distillation range, at 101.3 kPa (760 mm Hg) pressure, max, °C	5	D850
Initial distillation temperature, min, °C	137	...
Dry point, max, °C	143	...

^A The *p*-xylene and ethylbenzene specifications represent the distribution of these components within the C₈ aromatics and not in the total sample.

^B Clear liquid free of sediment and haze when observed at 18.3 to 25.6°C (65 to 78°F).

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.

*A Summary of Changes section appears at the end of this standard.