



Designation: D 5211 – 01

## Standard Specification for Xylenes for *p*-Xylene Feedstock<sup>1</sup>

This standard is issued under the fixed designation D 5211; 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 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 E 29.

1.3 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:

- D 850 Test Method for 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 2306 Test Method for C<sub>8</sub> Aromatic Hydrocarbon Analysis by Gas Chromatography<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>
- D 4045 Test Method for Sulfur in Petroleum Products by Hydrogenolysis and Rateometric Colorimetry<sup>3</sup>
- D 4629 Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection<sup>3</sup>
- D 5194 Test Method for Trace Chloride in Liquid Aromatic Hydrocarbons<sup>2</sup>
- D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry<sup>2</sup>

D 5808 Test Method for Determining Organic Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry<sup>2</sup>

D 6069 Test Method for Trace Nitrogen in Aromatic Hydrocarbons by Oxidative Combustion and Reduced Pressure Chemiluminescence Detection<sup>2</sup>

D 6212 Test Method for Total Sulfur in Aromatic Compounds by Hydrogenolysis and Rateometric Colorimetry<sup>2</sup>

D 6313 Test Method for Total Sulfur in Aromatic Compounds by Hydrogenolysis and Sulfur Specific Difference Photometry<sup>2</sup>

D 6366 Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection<sup>2</sup>

D 6428 Test Method for Total Sulfur in Liquid Aromatic Hydrocarbons and Their Derivatives by Oxidative Combustion and Electrochemical Detection<sup>2</sup>

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications<sup>4</sup>

#### 2.2 Other Document:

OSHA Regulations, 29 CFR, paragraphs 1910.1000 and 1910.1200<sup>5</sup>

### 3. Properties

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

Property	Specification	ASTM Test Method
<i>p</i> -xylene, <sup>4</sup> min, weight %	18	D 2306
Ethylbenzene, <sup>4</sup> max, weight %	20	D 2306
Toluene, max, weight %	0.5	D 2360
C9 and higher boiling aromatic hydrocarbons, max, weight %	1.0	D 2360
Nonaromatic hydrocarbons, max, weight %	0.3	D 2360
Nitrogen, max, mg/kg	1.0 <sup>B</sup>	D 4629 or D 6069 or D 6366

<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.

Current edition approved June 10, 2001. Published August 2001. Originally published as D 5211 – 91. Last previous edition D 5211 – 00.

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

<sup>3</sup> Annual Book of ASTM Standards, Vol 05.02.

<sup>4</sup> Annual Book of ASTM Standards, Vol 14.02.

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

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