



Standard Specification for O-Xylene 980¹

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1. Scope

1.1 This specification covers a grade of o-xylene identified as ortho-Xylene 980.

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 E 29.

1.3 Consult current OSHA regulations and supplier's Material Safety Data Sheets, 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 Materials²
- D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)²
- D 1492 Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration²
- D 3437 Practice for Sampling and Handling Cyclic Products²
- D 3797 Test Method for Analysis of o-Xylene by Gas Chromatography²

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry²

D 5776 Test Method for Bromine Index of Aromatic Hydrocarbons by Electrometric Titration²

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications³

2.2 Other Document:⁴

OSHA Regulations 29 CFR, Paragraphs 1910.1000 and 1910.1200

3. Properties

3.1 O-Xylene 980 shall conform to the following requirements:

Property	Specification	ASTM Test Method
Purity, min, wt %	98.0	D 3797
Nonaromatic hydrocarbons, max, wt %	0.5	D 3797
p-Xylene plus m-Xylene, max, wt %	1.3	D 3797
C9 and heavier aromatics, max, wt %	0.8	D 3797
Bromine index, max mg/100 g	100	D 1492
Appearance	^A	...
Color, Pt-Co scale, max	10	D 1209
Distillation range, including the temperature, 144.4°C at 101.3 kPa (760 mm Hg) pressure, max, °C	2.0	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 o-Xylene

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² Annual Book of ASTM Standards, Vol 06.04.

³ Annual Book of ASTM Standards, Vol 14.02.

⁴ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

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