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Standard Specification for O-Xylene 980[1]

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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 Materials[2]

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 Titration[2]

D 3437 Practice for Sampling and Handling Cyclic Products[2]

D 3797 Test Method for Analysis of o-Xylene by Gas Chromatography[2]

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry[2]

D 5776 Test Method for Bromine Index of Aromatic Hydrocarbons by Electrometric Titration[2]

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications[3]

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

[A] Clear 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

[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] *Annual Book of ASTM Standards*, Vol 06.04.

[3] *Annual Book of ASTM Standards*, Vol 14.02.

[4] Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.