



Designation: ~~D3193-96(Reapproved2003)~~ Designation: D 3193 – 09

## Standard Specification for Ethylbenzene<sup>1</sup>

This standard is issued under the fixed designation D 3193; 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 ethylbenzene.

1.2 Consult current OSHA regulations, supplier's Material Safety Data Sheets for all materials, and local regulations used in this specification.

1.3 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.

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

D 1209 [Test Method for Color of Clear Liquids \(Platinum-Cobalt Scale\)](#)

D 3437 [Practice for Sampling and Handling Liquid Cyclic Products](#)

~~D3961 Test Method for Trace Quantities of Sulfur in Liquid Aromatic Hydrocarbons by Oxidative Microcoulometry<sup>2</sup>~~

~~D4045 Test Method for Sulfur in Petroleum Products by Hydrogenolysis and Rateometric Colorimetry~~ [4176 Test Method for Free Water and Particulate Contamination in Distillate Fuels \(Visual Inspection Procedures\)](#)

D 5060 [Test Method for Determining Impurities in High-Purity Ethylbenzene by Gas Chromatography](#)

D 5194 [Test Method for Trace Chloride in Liquid Aromatic Hydrocarbons](#)

D 5386 [Test Method for Color of Liquids Using Tristimulus Colorimetry](#)

~~D 5808 Test Method for Determining Organic Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry<sup>2</sup>~~ [Test Method for Determining Organic Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry](#)

[D 7183 Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultraviolet Fluorescence](#)

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

2.2 *Other Document:*

*OSHA Regulations, 29 CFR,*

[OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200](#)<sup>3</sup>

### 3. Properties

3.1 Ethylbenzene shall conform to the following requirements:

Property	Specification	ASTM Test Method
Purity, min, weight %	99.00	D 5060
Benzene, max, weight %	0.1	D 5060
Toluene, max, weight %	0.4	D 5060
Xylenes, max, weight %	0.4	D 5060
Cumene, max, weight %	0.03	D 5060

<sup>1</sup> This specification is under the jurisdiction of ASTM/STEM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.07 on Styrene, Ethylbenzene, and C<sub>9</sub> and C<sub>10</sub> Aromatic Hydrocarbons.

Current edition approved Jan. 10, 2003. Published March 2003. Originally approved in 1991. Last previous edition approved in 1996 as D3193-96 on Styrene, Ethylbenzene and C9 and C10 Aromatic Hydrocarbons.

Current edition approved Jan. 15, 2009. Published February 2009. Originally approved in 1991. Last previous edition approved in 2003 as D 3193 – 96 (2003).

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

<sup>2</sup> For referenced STEM standards, visit the STEM website, [www.astm.org](http://www.astm.org), or contact STEM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of STEM Standards* volume information, refer to the standard's Document Summary page on the STEM website.

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

<sup>3</sup> 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.