



Designation: **D2827—12 D2827 – 12a**

## Standard Specification for Styrene Monomer<sup>1</sup>

This standard is issued under the fixed designation D2827; 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 reappraisal. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

### 1. Scope\*

1.1 This specification covers styrene monomer.

1.2 The following applies to all specified limits in this standard: for purposes of determining conformance with this standard, 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 [E29](#).

1.3 The values stated in SI units are to be regarded as standard.

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

### 2. Referenced Documents

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

[D1016](#) Test Method for Purity of Hydrocarbons from Freezing Points

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

[D2119](#) Test Method for Aldehydes in Styrene Monomer

[D2121](#) Test Methods for Polymer Content of Styrene Monomer and AMS (–Methylstyrene)

[D2340](#) Test Method for Peroxides in Styrene Monomer

[D3437](#) Practice for Sampling and Handling Liquid Cyclic Products

[D4017](#) Test Method for Water in Paints and Paint Materials by Karl Fischer Method

[ASTM D2827-12a](#)

<https://standards.iteh.ai/catalog/standards/sist/7bc969f6-c505-43fb-ad52-e0add1d058d2/astm-d2827-12a>

<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 [D16.07](#) on Styrene, Ethylbenzene and C9 and C10 Aromatic Hydrocarbons.

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

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

**D4590** Test Method for Colorimetric Determination of *p-tert*-Butylcatechol In Styrene Monomer or AMS (–Methylstyrene) by Spectrophotometry

**D5135** Test Method for Analysis of Styrene by Capillary Gas Chromatography

**D5386** Test Method for Color of Liquids Using Tristimulus Colorimetry

**D6229** Test Method for Trace Benzene in Hydrocarbon Solvents by Capillary Gas Chromatography

**D6304** Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration

**D7375** Test Method for Trace Quantities of Water in Aromatic Hydrocarbons and Their Mixtures by Coulometric Karl Fischer Titration

**D7504** Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography and Effective Carbon Number

**D7704** Test Method for Total Aldehydes in Styrene Monomer by Potentiometric Titration

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

**E1064** Test Method for Water in Organic Liquids by Coulometric Karl Fischer Titration

2.2 *Other Document:*

**OSHA Regulations, 29CFR** paragraphs 1910.1000 and 1910.1200<sup>3</sup>

### **3. Properties**

3.1 Styrene monomer shall conform to the following requirements:

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<https://standards.itih.ai/catalog/standards/sist/7bc969f6-c505-43fb-ad52-e0add1d058d2/astm-d2827-12a>

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<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>.