



Designation: D 6367 – 9904

Standard Specification for AMS (α -Methylstyrene)¹

This standard is issued under the fixed designation D 6367; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This specification covers AMS (α -Methylstyrene).

1.2 The following applies to all 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, suppliers’ Material Safety Data Sheets, and local regulations for all materials used in this specification.

2. Referenced Documents

2.1 *ASTM Standards:*²

D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)

D 2121 Test Method for Polymer Content of Styrene Monomer and α -Methylstyrene

D 3160 Test Method for Phenol Content of Cumene (Isopropylbenzene) or AMS (α -Methylstyrene)

D 3437 Practice for Sampling and Handling Liquid Cyclic Products

D 4590 Test Method for Colorimetric Determination of *p*-tert-Butylcatechol in Styrene Monomer or AMS (α -Methylstyrene) by Spectrophotometry

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry

~~D 6144 Standard Test~~ 6144 Test Method for Analysis of AMS (α -Methylstyrene) by Capillary Gas Chromatography

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

2.2 *Other Documents:*

OSHA Regulations, 29CFR, paragraphs 1910.1000 and 1910.1200³

¹ This specification is under the jurisdiction of ASTM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.07 on Styrene, Ethylbenzene, and C₉ and C₁₀ Aromatic Hydrocarbons.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards*, Vol 06.04, volume information, refer to the standard’s Document Summary page on the ASTM website.

Annual Book

³ Available from U.S. Government Printing Office Superintendent of ~~ASTM Standards~~, Vol 14-02: Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

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

3. Properties

3.1 AMS shall conform to the requirements shown in Table 1.

TABLE 1 Requirements

| Property | Specification | ASTM Test Method |
|---------------------|---------------------------------------|-----------------------|
| AMS, min, weight % | 99.00 | D 6144 |
| Phenols, max, mg/kg | 20 | D 3160 |
| Polymer, max, mg/kg | 10 | D 2121, Test Method A |
| Inhibitor, mg/kg | 40-20 (or as required) | D-4590 |
| Inhibitor, mg/kg | 10-20 (or as required) ^{A,B} | D 4590 or D 6144 |
| Appearance | ^A | |
| Appearance | ^B | |
| Color, max, Pt-Co | 20 ^B | D 1209 or D 5386 |
| Color, max, Pt-Co | 20 ^C | D 1209 or D 5386 |

^ATypically TBC (para-liquid free of sedimentary-butyl and haze when observed at 18.3 to 25.6°C (65 to 78°F)).

^BClear liquid free of sediment and haze when observed at 18.3 to 25.6°C (65 to 78°F).

^CTest Method D 5386 is the referee test method in case of dispute.

4. Sampling

4.1 Sample the material in accordance with Practice D 3437.

5. Keywords

5.1 AMS; α -Methylstyrene; AMS; catechol; TBC; tertiary-butyl catechol

SUMMARY OF CHANGES

Committee D16 has identified the location of selected changes to this standard since the last issue (D 6367 – 99) that may impact the use of this standard.

(1) Specification D 6367 was revised to current D16 Editorial Standards.

(2) Section 3 – Reference to TBC (para-tertiary-butylcatechol) as the inhibitor most commonly used was added to the specification table as well as reference to Test Method D 6144.

(3) Section 5 – Additional keywords TBC; catechol; tertiary-butyl catechol were added.

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