



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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

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

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* volume information, refer to the standard’s Document Summary page on the ASTM website.

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	10-20 (or as required) ^{A,B}	D 4590 or D 6144
Appearance	_B	
Color, max, Pt-Co	20 ^C	D 1209 or D 5386

^ATypically TBC (para-tertiary-butyl catechol).

^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.

D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry

D 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

3. Properties

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

4. Sampling

4.1 Sample the material in accordance with Practice D 3437.

5. Keywords

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

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

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

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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