Designation: ~~D6367 – 17~~ D6367 – 21

Standard Specification for AMS (α-Methylstyrene)[1]

This standard is issued under the fixed designation D6367; 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~~ 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 E29.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 Consult current OSHA regulations, suppliers' Safety Data Sheets, and local regulations for all materials used in this specification.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D3160 Test Method for Phenol Content of Cumene (Isopropylbenzene) or AMS (α–Methylstyrene)
D3437 Practice for Sampling and Handling Liquid Cyclic Products
D4590 Test Method for Colorimetric Determination of *p-tert*-Butylcatechol In Styrene Monomer or AMS (α–Methylstyrene) by Spectrophotometry
D5386 Test Method for Color of Liquids Using Tristimulus Colorimetry
D6144 Test Method for Analysis of AMS (α-Methylstyrene) by Capillary Gas Chromatography
D7504 Test Method for Trace Impurities in Monocyclic Aromatic Hydrocarbons by Gas Chromatography and Effective Carbon Number
D7977 Test Methods for Polymer Content of AMS (α-Methylstyrene)
D8005 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)
E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
E2680 Test Method for Appearance of Clear, Transparent Liquids (Visual Inspection Procedure)

[1] This specification is under the jurisdiction of ASTM Committee D16 on Aromatic, Industrial, Specialty 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.

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

2.2 *Other Documents:*
OSHA Regulations 29 CFR paragraphs 1910.1000 and 1910.1200[3]

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~~	~~D6144~~
AMS, min, mass %	99.00[A]	D6144 or D7504
Phenols, max, mg/kg	20	D3160
Polymer, max, mg/kg	10	D7977, Test Method A
~~Inhibitor, mg/kg~~	~~10-20 (or as required)[A]~~	~~D4590 or D6144~~
Inhibitor, mg/kg	10-20 (or as required)[B]	D4590 or D6144
~~Appearance, free of haze, particulates or suspended matter particles~~	~~pass~~	~~E2680~~
Appearance clear liquid free of sediment and haze at 18.3 to 25.6°C (65 to 78°F)	pass	E2680
~~Color, max, Pt-Co~~	~~20[B]~~	~~D5386 or D8005~~
Color, max, Pt-Co	20[C]	D5386 or D8005

[A] Test Method D6144 is the referee test method in case of dispute.
[B] Typically TBC (para-tertiary-butyl catechol).
[C] Test Method D5386 is the referee test method in case of dispute.

4. Sampling

4.1 Sample the material in accordance with Practice D3437.

5. Keywords

5.1 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 (D6367 – 17) that may impact the use of this standard. (Approved Nov. 1, 2021.)

(1) Test Method D7504 added and appearance verbiage updated.

[3] 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.