

This document is not an ASTM standard and is intended only to provide the user of an ASTM standard an indication of what changes have been made to the previous version. Because it may not be technically possible to adequately depict all changes accurately, ASTM recommends that users consult prior editions as appropriate. In all cases only the current version of the standard as published by ASTM is to be considered the official document.



Designation: D 2634 – 86 (Reapproved 1998)



Designation: D 2634 – 02

Standard Specification for Methyl Amyl Acetate (95 % Grade)¹

This standard is issued under the fixed designation D 2634; 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 This specification is under the jurisdiction of ASTM Committee D-1 D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.35 on Solvents, Plasticizers, and Chemical Intermediates.

Current edition approved ~~Sept. 26, 1986~~ May 10, 2002. Published ~~November 1986~~ July 2002. Originally published as D 2634 – 67. Last previous edition D 2634 – 86 (1998).

1. Scope*

1.1 This specification covers methyl amyl acetate² (95 % grade) for use in paint, varnish, and related products.

1.2 For specific hazard information and guidance, see the supplier's Material Safety Data Sheet for materials listed in this specification.

1.3 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 E 29.

2. Referenced Documents

2.1 ASTM Standards:

D 268 Guide for Sampling and Testing Volatile Solvents and Chemical Intermediates for Use in Paint and Related Coatings and Materials³

D 1078 Test Method for Distillation Range of Volatile Organic Liquids³

D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)³

D 1296 Test Method for Odor of Volatile Solvents and Diluents³

D 1353 Test Method for Nonvolatile Matter in Volatile Solvents for Use in Paint, Varnish, Lacquer, and Related Products³

D 1364 Test Method for Water in Volatile Solvents (Karl Fischer Reagent Titration Method)³

D 1476 Test Method for Heptane Miscibility of Lacquer Solvents³

D 1613 Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products³

D 1617 Test Method for Ester Value of Lacquer Solvents and Thinners³

D 4052 Test Method for Density and Relative Density of Liquids by Digital Density Meter⁴

E 1 Specification for ASTM Thermometers⁵

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁶

E 300 Practice for Sampling Industrial Chemicals⁷

2.2 U.S. Federal Specification:

PPP-C-2020 Packaging of Chemicals, Liquid, Dry, and Paste⁸

3. Properties

3.1 Methyl amyl acetate shall conform to the following requirements:

Apparent specific gravity:	
20/20°C	0.856 to 0.859
25/25°C	0.852 to 0.855

² This compound is also known as 4-methyl-2-pentyl acetate.

³ Annual Book of ASTM Standards, Vol 06.04.

⁴ Annual Book of ASTM Standards, Vol 05.02.

⁵ Annual Book of ASTM Standards, Vol 14.03.

⁶ Annual Book of ASTM Standards, Vol 15.05, 14.02.

⁷ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094.

⁸ Annual Book of ASTM Standards, Vol 15.05.

⁸ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098.

Color, Pt-Co units, max	15
Distillation range	
Below 142.5°C	none
Above 149.5°C	none
Nonvolatile matter mg/100 mL, max	5
Water, wt %, max	0.4
Water, wt %, max (see Note 1)	0.1
Acidity (free acid as acetic acid), wt %, max	0.04
Acidity (free acid as acetic acid), wt %, max	0.01
Ester value, wt %, min	95.0

NOTE 1—In some cases, Test Method D 1476 may serve as a useful alternative method to determine the presence of water. Because it is a qualitative test, its use would require agreement between user and supplier.

4. Sampling

4.1 The material shall be sampled in accordance with Practice E 300.

5. Test Methods

5.1 The properties enumerated in this specification shall be determined in accordance with the following ASTM methods:

5.1.1 *Apparent Specific Gravity*—Determine the apparent specific gravity by any method that is accurate to the third decimal place, the temperature of both specimen and water being 20°C. See Guide D 268 or Test Method D 4052.

5.1.2 *Color*—Test Method D 1209.

5.1.3 *Distillation Range*—Test Method D 1078, using an ASTM Solvents Distillation Thermometer 102C having a range from 123 to 177°C, and conforming to the requirements of Specification E 1, shall be used in connection with this test.

5.1.4 *Nonvolatile Matter*—Test Method D 1353.

5.1.5 *Odor*—Test Method D 1296.

5.1.6 *Water*—Test Method D 1364.

5.1.7 *Acidity*—Test Method D 1613.

5.1.8 *Ester Value*—Test Method D 1617.

6. Packaging and Package Marking

6.1 Package size shall be agreed upon by the purchaser and the supplier.

6.2 Packaging shall conform to applicable carrier rules and regulations or when specified shall conform to Fed. Spec. PPP-C-2020.

7. Keywords

7.1 ester; methyl amyl acetate; solvent

SUMMARY OF CHANGES

Committee D01.35 has identified the location of selected changes to this standard since the last issue (D 2634 - 86 (1998)) that may impact the use of this standard.

- (1) Added reference to Practice E 29 to Scope.
- (2) Added Practice E 29 to list of Referenced Documents.
- (3) Added Test Method D 1476 to list of Referenced Documents.
- (4) Added Note to Properties section to reference Test Method D 1476.
- (5) Added keywords “ester” and “solvent.”

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org).