



Designation: D2978 – 23

Standard Test Method for Volume of Peat and Peat-Based Growing Media¹

This standard is issued under the fixed designation D2978; 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 test method covers the measurement of the volume of uncompressed (loose) and compressed (baled) peat and peat-based growing media and is used as a quality control measurement to determine if the package contains the labeled amount of material. The results of this test method is highly dependent on the experience of the personnel running the procedure.

1.2 This standard is for peat and peat-based growing media only. While it is possible for other types of growing media to use this standard it is outside the scope and the methodology may have to be altered to accommodate a different growing media.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard. Except, that the sieve designations are typically identified using the “alternative” system in accordance with Practice [E11](#), such as 3 in. and No. 200, instead of the “standard” of 75 mm and 75 μ m, respectively.

1.4 All observed and calculated values shall conform to the guidelines for significant digits and rounding established in Practice [D6026](#).

1.4.1 The procedures used to specify how data are collected/recorded or calculated in this standard are regarded as the industry standard. In addition, they are representative of the significant digits that generally should be retained. The procedures used do not consider material variation, purpose for obtaining the data, special purpose studies, or any considerations for the user’s objectives; and it is common practice to increase or reduce significant digits of reported data to be commensurate with these considerations. It is beyond the scope of this standard to consider significant digits used in analysis methods for engineering design.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the*

responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.6 *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

[D653 Terminology Relating to Soil, Rock, and Contained Fluids](#)

[D3740 Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction](#)

[D6026 Practice for Using Significant Digits and Data Records in Geotechnical Data](#)

[E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves](#)

3. Terminology

3.1 Definitions:

3.1.1 For definitions of common technical terms in this standard, refer to Terminology [D653](#).

4. Summary of Test Method

4.1 This test method consists of dividing the particles of peat or peat-based growing media by passing them through a 0.5 in. (12.5 mm) sieve by allowing them to fall into a volume-measuring container and if required, measuring the outer dimensions of uncompressed peat.

5. Significance and Use

5.1 This test method is used to quantify the volume of peat and peat-based growing media under consideration in commercial transactions to determine if the package contains the

¹ This test method is under the jurisdiction of ASTM Committee [D18](#) on Soil and Rock and is the direct responsibility of Subcommittee [D18.22](#) on Media for Plant Growth.

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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