

Designation: D2118 - 18

# Standard Practice for Assigning a Standard Commercial Moisture Content for Wool and its Products<sup>1</sup>

This standard is issued under the fixed designation D2118; 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  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

## 1. Scope

- 1.1 This practice recommends that a single value be adopted for the commercial moisture content of wool in any of the following forms:
  - 1.1.1 Scoured,
  - 1.1.2 Carbonized and neutralized,
  - 1.1.3 Noils, uncarbonized,
  - 1.1.4 Top, oil or dry combed,
  - 1.1.5 Yarn, worsted,
  - 1.1.6 Yarn, woolen,
  - 1.1.7 Yarn, hand knitting, or
  - 1.1.8 Fabric.
- 1.2 *Limitations*—Grease wool, pulled wool, and wool with pH below 5.0 are excluded from this practice.
- 1.3 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.
- 1.4 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:<sup>2</sup>

D123 Terminology Relating to Textiles

D584 Test Method for Wool Content of Raw Wool— Laboratory Scale

D1909 Standard Tables of Commercial Moisture Regains

and Commercial Allowances for Textile Fibers

D2720 Practice for Calculation of Commercial Weight and Yield of Scoured Wool, Top, and Noil for Various Commercial Compositions

D4845 Terminology Relating to Wool

#### 3. Terminology

- 3.1 For definitions of textile terms used in this practice: carbonized and neutralized wool, commercial moisture content, wool, refer to Terminology D4845.
- 3.2 For the definition of wool and other textile terms used in this practice, refer to Terminology D123.

# 4. Significance and Use

- 4.1 The purpose of this practice is to bring about uniformity of commercial moisture standards in all ASTM specifications relating to wool and its products.
- 4.2 This practice provides a recommended single value for a standardized commercial moisture content for wool and its products. This avoids difficulties encountered in calculating the amount of moisture-free fiber present in a given mass of wool in any one of the forms listed in 1.1.1 to 1.1.8 due to trade practices which recognize various commercial moisture allowance values used by certain segments of the trade. (See Test Method D584, Section 3.5, Table D1909,D1909 Note E, and the Tables in Practice D2720).
- 4.3 The recommended commercial moisture content should be used where it is desirable to avoid problems in determining moisture-free fiber content when the form of the wool is changed. For example: from scoured wool (12.0 % moisture content) to worsted yarn, dry spun (13.04 % moisture content).

#### 5. Recommended Commercial Moisture Content

5.1 Use 12.0% as the commercial moisture content for wool and its products.

Note 1—For other commercial regain values commonly used for wool in various forms, refer to Table 1 in Table D1909, Table 1 in Practice D2720, and Note 1 in Test Method D584.

5.2 The value of 12.0 % has been assigned as the commercial moisture content for the following reasons:

<sup>&</sup>lt;sup>1</sup> This practice is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.13 on Wool and Felt.

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<sup>&</sup>lt;sup>2</sup> 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.