Designation: D1060 – 10

Standard Practice for Core Sampling of Raw Wool in Packages for Determination of Percentage of Clean Wool Fiber Present[1]

This standard is issued under the fixed designation D1060; 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 practice for sampling covers a procedure for obtaining samples from lots of grease, pulled, or scoured wool or related animal fibers in bales or bags for the determination of the clean wool fiber present by a procedure similar to that described in Test Method D584.

1.2 This practice provides a description of suitable core sampling equipment, the sampling procedure, and the method for determining the number of packages to be bored and the number of cores to be taken from each sampled package.

1.3 Reliable estimates are given for the standard deviation of the percentage clean wool fiber present between packages and within packages for lots of many types of raw wool.

1.4 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.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D123 Terminology Relating to Textiles

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

E105 Practice for Probability Sampling of Materials

E122 Practice for Calculating Sample Size to Estimate, With Specified Precision, the Average for a Characteristic of a Lot or Process

D4845 Terminology Relating to Wool

3. Terminology

3.1 For all terminology relating to D13.13, Wool and Wool Felt, refer to Terminology D4845.

3.1.1 The following terms are relevant to this standard: *clean wool fiber present, core and raw wool*.

3.2 For definitions of other textile terms used in this practice, refer to Terminology D123.

4. Summary of Practices

4.1 The lot is core sampled in accordance with one of a series of equivalent schedules based on estimates of variability of the percentage clean wool fiber present and on the required level of precision. A set of packages of wool is taken as a lot sample. From each package in the lot sample, a fixed number of cores of wool is drawn to be used as a laboratory sample. Guidance in the selection of the most economical of the equivalent schedules is provided.

5. Significance and Use

5.1 Core sampling is widely accepted, when applicable, for obtaining a laboratory sample representative of the clean wool fiber present in a lot of packaged raw wool.

5.2 If the wool is so loosely packed that a core cannot be cut, or if it is so highly compressed that the sampling tool cannot readily penetrate into the package to the required depth and in the required direction, core sampling is not applicable. The density of wool in most types of commercial packages is suitable for sampling by this method.

5.3 The procedure described in this practice is adapted to the application of statistical methods for estimating the size of sample required to achieve a required level of sample precision at minimum cost.

NOTE 1—The basic sampling equipment, operating procedure, and statistical approach used in this practice have been adapted for sampling lots of wool for the determination of other properties that are not affected by boring, such as average fiber diameter, and for sampling lots of other bulk fibers in packages.

[1] This practice is under the juristiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.13 on Wool and Felt.

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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.

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