



Designation: D 2525 – 90 (Reapproved 1995)

Standard Practice for Sampling Wool for Moisture¹

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1. Scope

1.1 This practice covers the design of a sampling plan to be used to obtain samples for the determination of the moisture content of grease wool, scoured wool, carded wool, garnetted wool, wool top and intermediate products, and rovings.

1.2 Directions are given for the designation of sampling units, calculation of the number of sampling units required to achieve a preselected precision and confidence level or, alternatively, for calculating the confidence limits for the mean based on the variability of the sample tested.

NOTE 1—This practice for devising a sampling plan is intended for use in connection with Test Method D 1576 or Test Method D 2462. The sampling of raw wool for the determination of clean wool fiber present is covered in Practice D 1060.

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

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textiles²

D 1060 Practice for Core Sampling of Raw Wool in Packages for Determination of Percentage of Clean Wool Fiber Present²

D 1576 Test Method for Moisture in Wool by Oven-Drying²

D 2462 Test Method for Moisture in Wool by Distillation with Toluene²

E 122 Practice for Choice of Sample Size to Estimate a Measure of Quality for a Lot or Process³

3. Terminology

3.1 Definitions:

3.1.1 *laboratory sample, n*—a portion of material taken to represent the lot sample, or the original material, and used in the laboratory as a source of test specimens.

3.1.2 *lot, n—in acceptance sampling*, that part of a consignment or shipment consisting of material from one production lot.

3.1.3 *lot sample, n*—one or more shipping units taken at random to represent an acceptance sampling lot and used as a source of laboratory samples.

3.1.4 *sample, n—(1)* a portion of a lot of material which is taken for testing or record purposes.

(2) the group of specimens used, or observations made, which provide information that can be used for making statistical inferences about the population from which they were drawn.

3.1.5 *sampling unit, n—in wool*, a portion of material that is taken at one time from one physical location and that is combined with similar portions to make up the laboratory sample.

3.1.5.1 *Discussion*—A sampling unit may or may not have the same physical size as a specimen. Examples of sampling units include: (1) for bulk materials seen as scoured wool, a handful of wool conforming to a stated mass range, (2) for cored material, a minimum mass of material collected by one insertion of a coring tool, (3) for sliver, a stated length of material, and (4) a single package, such as a ball of top.

3.1.6 *specimen, n*—a specific portion of a material or a laboratory sample upon which a test is performed or which is selected for that purpose.

3.1.7 For definitions of moisture, moisture content, moisture regain, and other textile terms used in this practice, refer to Terminology D 123.

4. Summary of Practice

4.1 Directions are given for subdividing a lot of material into potential sampling units and for providing each potential sampling unit with its own unique identification.

4.2 Directions are given for calculating the number of such sampling units required to give a preselected allowable variation at a stated probability level, or for calculating confidence limits for the sample mean obtained for a given size of sample.

4.3 Directions are given for deciding which particular sampling units should be chosen to constitute the required lot sample. These directions ensure that all potential sampling units have approximately the same chance of being selected for the lot sample.

¹ This practice is under the jurisdiction of the ASTM Committee D-13 on Textiles, and is the direct responsibility of Subcommittee D13.13 on Wool and Wool Felt.

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² Annual Book of ASTM Standards, Vol 07.01.

³ Annual Book of ASTM Standards, Vol 14.02.