



Standard Test Method for Cashmere Coarse-Hair Content in Cashmere¹

This standard is issued under the fixed designation D 2816; 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 a sequential procedure for determining whether or not the cashmere coarse-hair content of a sample exceeds a specified value.

NOTE 1—For the maximum allowable cashmere coarse-hair content in cashmere, refer to Specification D 2817.

NOTE 2—For the quantitative analysis of cashmere hair and blends of cashmere hair and other fibers, refer to Test Methods D 629.

1.2 This test method is applicable only to cashmere hair in the form of roving, yarn, or fabric, and to the cashmere hair content of blends with other fibers, where the expected cashmere coarse-hair content is not more than five mass percent (see Footnote C of Table 1). For greater expected mass percentages of cashmere coarse-hair, see Test Methods D 629.

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 Textile Materials²

D 629 Test Methods for Quantitative Analysis of Textiles²

D 2130 Test Method for Diameter of Wool and Other Animal Fibers by Microprojection²

D 2817 Specification for Maximum Cashmere Coarse-Hair Content in Cashmere²

3. Terminology

3.1 *Definitions*—For definitions of textile terms used in this test method, refer to Terminology D 123.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *cashmere, n—in roving, yarn, or fabrics*, cashmere hair or products made therewith having a cashmere coarse-hair content not exceeding a specified maximum percentage by length.

3.2.2 *cashmere coarse-hair, n*—those coarse fibers in cashmere hair having widths greater than 30 μm .

3.2.2.1 *Discussion*—For the purpose of this test method, width shall be determined as directed in Test Method D 2130.

3.2.3 *cashmere coarse-hair content, n*—the total length of the cashmere coarse-hair fibers that are present, expressed as a percentage of the total length of all the cashmere hair fibers; that is, the percentage by length of cashmere coarse-hair in cashmere hair.

3.2.4 *cashmere down, n*—those fibers in cashmere hair having widths of 30 μm or less.

3.2.4.1 *Discussion*—For the purpose of this test method, width shall be determined as directed in Test Method D 2130.

3.2.5 *cashmere hair, n*—the fibers produced by a form of goat (*Capra hircus*) indigenous to Asia and known as the cashmere goat.

3.2.5.1 *Discussion*—Characteristically, cashmere hair consists of fine down (undercoat) fibers and coarse (outer-coat) fibers.

4. Summary of Test Method

4.1 One thousand (or more) individual fibers of cashmere hair are examined microscopically and classified either as cashmere down or cashmere coarse-hair on the basis of fiber width.

4.2 The procedure (6.1 and 6.2) for classifying a fiber as cashmere coarse-hair or cashmere requires microscopic examination of fiber segments of fixed length. The number of fiber segments of each width category is proportional to the total length of the fibers in each category. Hence, the percentage by length of cashmere coarse-hair in cashmere hair is equal to the percentage by number of cashmere coarse-hair segments as determined by this procedure.

4.3 The observed number of cashmere coarse-hair fibers is compared with the numbers in Table 1 and a decision is made (1) to accept the lot as conforming, (2) to reject the lot as nonconforming, or (3) to continue testing. The counting, classification, and comparison process is continued until a decision can be made as to whether the lot does or does not conform to the specification. Table 1 is based on stated levels of confidence.

5. Significance and Use

5.1 This test method may be used for determining compliance with a specification for maximum cashmere coarse-hair content and is required to be used for determining compliance with Specification D 2817.

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

Current edition approved Sept. 10, 1995. Published December 1995. Originally published as D 2816 – 69 T. Last previous edition D 2816 – 91.

² *Annual Book of ASTM Standards*, Vol 07.01.