



Designation: D2252 – 18

Standard Specification for Fineness of Types of Alpaca¹

This standard is issued under the fixed designation D2252; 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 specification is applicable in the classification of alpaca into types according to fineness.

1.2 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.

1.3 *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:*²

[D123 Terminology Relating to Textiles](#)

[D2130 Test Method for Diameter of Wool and Other Animal Fibers by Microprojection](#)

[D4845 Terminology Relating to Wool](#)

¹ This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.13 on Wool and Felt. Current edition approved July 1, 2018. Published August 2018. Originally approved in 1964. Last previous edition approved in 2009 as D2252 – 05(2009) which was withdrawn January 2018 and reinstated in July 2018. DOI: 10.1520/D2252-18

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.

3. Terminology

3.1 For definitions of textile terms used in this specification: alpaca, average fiber diameter, fineness, refer to Terminology [D4845](#).

3.2 For definitions of other textile terms used in this specification, refer to Terminology [D123](#).

4. Significance and Use

4.1 This specification for fineness is intended as a guide for production, preparation, and marketing ([Note 1](#)) by comparing the average fiber diameter of a measured specimen with the fineness specifications for the various types listed in [Table 1](#). The standard deviation which expresses measured variability of a specimen may be compared with the average shown in [Table X2.1](#).

NOTE 1—Test Method [D2130](#) does not include any values for the precision to be expected in the testing of alpaca fibers. In an interlaboratory test in which six laboratories each made one test on each of six type samples, HTB-CB, HAXB-CB, HAAB-CB, HAB-CB, HLPB-CL, and HSKB-CL, the coefficient of variation of the average fiber diameters between laboratories, including test variation, was 3.2, 4.7, 3.8, 4.5, 2.2, and 0.93 % for the respective alpaca types.

5. Specification

5.1 The fineness of various types of alpaca shall conform to the average fiber diameter limits listed in [Table 1](#).

6. Sampling

6.1 Sample the material as directed in Test Method [D2130](#).

7. Test Method

7.1 Test the material as directed in Test Method [D2130](#). Measure at least the minimum number of fibers specified to attain confidence limits of the mean of $\pm 0.5 \mu\text{m}$ at a probability level of at least 95 % (see [Table A1.4](#) in Annex A1 to Test Method [D2130](#)).

8. Keywords

8.1 alpaca; animal fibers (except wool); fineness