



Standard Test Methods for Sewing Threads¹

This standard is issued under the fixed designation D 204; 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 These test methods can be used to evaluate sewing threads of any fiber.

1.1.1 The test methods in this standard are intended to evaluate only sewing thread taken from thread holders.

1.2 These test methods only provide for the measurement of sewing thread physical properties. These test methods do not address any other properties that may be important for the satisfactory performance of sewing threads under particular end use conditions.

1.3 These test methods can be used to measure the following properties:

	Sections
Colorfastness to Drycleaning	73-83
Colorfastness to Laundering	62-72
Colorfastness to Water Migration	84-94
Diameter	43-50
Length per Thread Holder	34-42
Shrinkage, Single Strand	51-61
Dry Heat	58.1
Boiling Water	58.2
Strength and Elongation	15-21
Single Strand—Conditioned	19.1.1
Single Strand—Wet	19.1.2
Loop Strength	19.2
Knot Strength	19.3
Twist	22-27
Twist Balance	28-33
Yarn Number	7-14

NOTE 1—For methods covering tests on prepared seams, refer to Test Methods D 1683 and D 3940.²

1.4 The values stated in SI units are to be regarded as standard; the values in English units are provided as information only and are not exact equivalents.

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:

¹ These test methods are under the jurisdiction of ASTM Committee D13 on Textiles, and are the direct responsibility of Subcommittee D13.58 on Yarn Test Methods, General.

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² *Annual Book of ASTM Standards*, Vol 07.02.

D 76 Specification for Tensile Testing Machines for Textiles³

D 123 Terminology Relating to Textiles³

D 1422 Test Method for Twist in Single Spun Yarns by the Untwist-Retwist Method³

D 1423 Test Method for Twist in Yarns by Direct-Counting³

D 1683 Test Method for Failure In Sewn Seams of Woven Fabrics³

D 1776 Practice for Conditioning and Testing Textiles³

D 1777 Test Method for Thickness of Textile Materials³

D 1907 Test Method for Linear Desnisty (Yarn Number) by the Skein Method³

D 2256 Test Method for Tensile Properties of Yarns by the Single-Strand Method³

D 2258 Practice for Sampling Yarn for Testing³

D 2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics³

D 3693 Specification for Labeled Length per Holder of Sewing Threads²

D 3823 Practice for Determining Ticket Numbers for Sewing Threads²

D 3940 Test Method for Bursting Strength (Load) and Elongation of Sewn Seams of Knit or Woven Stretch Textile Fabrics²

D 4848 Terminology of Force, Deformation and Related Properties of Textiles²

D 4849 Terminology Relating to Yarns and Fibers²

D 6193 Practice for Stitches and Seams²

2.2 AATCC Standards:

Test Method 135 Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics⁴

Evaluation Procedure 1, Gray Scale for Color Change⁴

Evaluation Procedure 3, Chromatic Transference Scale⁴

3. Terminology

3.1 Definitions:

3.1.1 Refer to Terminology D 4848 for definitions of the following terms used in this standard elongation; force and loop-breaking force.

3.1.2 Refer to Terminology D 4849 for definitions of the following terms used in this standard colorfastness; covered

³ *Annual Book of ASTM Standards*, Vol 07.01.

⁴ Available from American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.