



Standard Performance Specification for Towel Products for Institutional and Household Use¹

This standard is issued under the fixed designation D 5433; 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 covers the evaluation of specific performance characteristics of importance in woven and knitted kitchen towel, dishcloth, crash towel, huck towel, washcloth, hand towel, bath towel, and bath sheet products for use in institutional and household environments.

1.2 This specification may be used by mutual agreement between the purchaser and the supplier to establish purchasing specification requirements.

1.3 The requirements in Tables 1 and 2 apply to the length and width directions for those properties where fabric direction is pertinent.

1.4 This specification is not applicable for coated and laminated products, nonwoven products, or terry fabrics used for apparel.

1.5 *This standard does not purport to address all of the safety problems, 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 629 Test Methods for Quantitative Analysis of Textiles²
- D 1230 Flammability of Apparel Textiles²
- D 1424 Test Method for Tearing Strength of Fabrics by the Falling-Pendulum Type (Elmendor) Apparatus²
- D 2261 Test Method for Tearing Strength of Fabrics by The Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)²
- D 2262 Test Method for Tearing Strength of Woven Fabrics By The Tongue (Single Rip) Method (Constant-Rate-of-Traversal Tensile Testing Machine)³
- D 2905 Practice for Statements on Number of Specimens for Textiles²
- D 3136 Terminology for Permanent Care Labels for Con-

sumer Textile and Leather Products Other Than Carpets and Upholstery²

D 3786 Test Method for Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics—Diaphragm Bursting Strength Tester Method⁴

D 3787 Test Method for Bursting Strength of Knitted Goods—Constant-Rate-of-Traversal (CRT) Ball Burst Test⁴

D 3882 Test Method for Bow and Skewness (Bias) in Woven and Knitted Fabrics⁴

D 3938 Guide for Evaluation of Textile Products in Relation to Refurbishing Described on Care Labels⁴

D 4390 Practice for Evaluation of the Performance of Terry Bathroom Products for Household Use⁴

D 4772 Test Method for Surface Water Absorption of Terry Fabrics (Water Flow Test Method)⁴

D 5034 Test Method for Breaking Force and Elongation of Textile Fabrics (Grab Test)⁴

2.2 AATCC Methods:⁵

8 Colorfastness to Crocking

16A Colorfastness to Light: Carbon Arc Lamp Continuous Light

16E Colorfastness to Light: Water Cooled Xenon-Arc Lamp, Continuous Light

61 Colorfastness to Washing, Domestic and Laundering Commercial, Accelerated

88B Appearance of Seams in Wash and Wear Items After Home Laundering

135 Dimensional Changes in Automatic Home Laundering of Woven or Knit Fabrics

96 Dimensional Changes in Laundering of Woven and Knitted Fabrics Except Wool

97 Non-Cotton Content of Bleached Cotton Textiles

116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

Evaluation Procedure 1 Gray Scale for Color Change

Evaluation Procedure 2 Gray Scale for Staining

Evaluation Procedure 3 AATCC Chromatic Transference Scale

NOTE 1—Reference to test methods in this specification give only the pertinent part of the designation of ASTM, AATCC, or other test methods. The current edition of each test method shall prevail.

¹ This specification is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.63 on Home Furnishings.

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

³ Discontinued- See 1995 *Annual Book of ASTM Standards*, Vol 07.01.

⁴ *Annual Book of ASTM Standards*, Vol 07.02.

⁵ Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709.