



## Standard Performance Specification for Women's and Girls' Knitted Sportswear Fabrics<sup>1</sup>

This standard is issued under the fixed designation D 4156; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This performance specification covers knitted fabrics comprised of any textile fiber or mixture of fibers, used in women's and girl's sportswear.

1.2 These requirements apply to the length and width directions for those properties where each fabric direction is pertinent.

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 Textiles<sup>2</sup>
  - D 2594 Test Methods for Stretch Properties of Knitted Fabrics Having Low Power<sup>2</sup>
  - D 2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics<sup>2</sup>
  - D 2905 Practice for Statements on Number of Specimens for Textiles<sup>2</sup>
  - D 3786 Test Method for Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics—Diaphragm Bursting Strength Tester Method<sup>3</sup>
  - D 3787 Test Method for Bursting Strength of Knitted Goods—Constant-Rate-of-Traverse (CRT), Ball Burst Test<sup>3</sup>
- #### 2.2 AATCC Methods:<sup>4</sup>
- 8 – 1977 Colorfastness to Crocking: AATCC Crockmeter Method
  - 15 – 1979 Colorfastness to Perspiration
  - 16 – 1977 Colorfastness to Light
  - 23 – 1975 Colorfastness to Burnt Gas Fumes
  - 61 – 1980 Colorfastness to Washing, Domestic, and Laundering, Commercial: Accelerated
  - 116 – 1977 Colorfastness to Crocking: Rotary Vertical

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.56 on Performance Standards for Textile Fabrics.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 07.01.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 07.02.

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

#### Crockmeter Method

124 – 1978 Appearance of Durable Press Fabrics after Repeated Home Launderings

132 – 1979 Colorfastness to Drycleaning

135 – 1978 Dimensional Changes in Automatic Home Laundering of Durable Press Woven or Knit Fabrics

Evaluation Procedure 1 Gray Scale for Color Change

Evaluation Procedure 2 Gray Scale for Staining

Evaluation Procedure 3 AATCC Chromatic Transference Scale

#### 2.3 Federal Standard:<sup>5</sup>

16 CFR, Chapter II—Consumer Product Safety Commission Subchapter D—Flammable Fabrics Act Regulations.

#### 2.4 Military Standard:<sup>6</sup>

MIL-STD-105D Sampling Procedures and Tables for Inspection by Attributes

NOTE 1—Reference to test methods in this standard give only the permanent part of the designation of ASTM, AATCC, or other test methods. The current editions of each test method cited shall prevail.

### 3. Terminology

#### 3.1 Definitions:

3.1.1 *sheer, n*—a fabric that is transparently thin or diaphanous.

3.1.1.1 *Discussion*—There is no clear distinction between sheer fabrics and nonsheer fabrics. The purchaser and the seller should agree in advance as to which category a fabric is to be classified.

3.2 For definitions of other textile terms used in this specification, refer to the individual ASTM and AATCC test methods and to Terminology D 123.

### 4. Specification Requirements

4.1 The properties of knitted fabrics for women's and girls' sportswear shall conform to the specification requirements in Table 1.

### 5. Significance and Use

5.1 Upon mutual agreement between the purchaser and the seller, fabrics intended for this end use should meet all of the requirements listed in Table 1 of this specification.

<sup>5</sup> Available from Superintendent of Documents, Government Printing Office, Washington, DC 20402.

<sup>6</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.