



## Standard Performance Specification for Knit Swimwear Fabrics<sup>1</sup>

This standard is issued under the fixed designation D 3996; 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 circular and warp knitted fabrics for use in knit swimwear, composed of any textile fiber or mixture of textile fibers.

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

1.3 The following precautionary statement pertains only to the test methods portion, Section 7, of this specification. *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 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 Colorfastness to Crocking: AATCC Crockmeter Method
- 15 Colorfastness to Perspiration
- 16 Colorfastness to Light
- 23 Colorfastness to Burnt Gas Fumes
- 61 Colorfastness to Washing, Domestic, and Laundering, Commercial: Accelerated
- 106 Colorfastness to Water: Sea
- 107 Colorfastness to Water
- 116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

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

129 Colorfastness to Ozone in the Atmosphere Under High Humidities

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

Evaluation Procedure No. 1 Gray Scale for Color Change

Evaluation Procedure No. 2 Gray Scale for Staining

Evaluation Procedure No. 3 AATCC Chromatic Transfer-ence Scale

162 Colorfastness to Water Chlorinated Pool

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

16 CFR 1610 Standard for Flammability of Clothing Textiles

NOTE 1—Reference to test methods in this specification 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 Definition:

3.1.1 *swimwear*—textile garments intended for wear in fresh, chlorinated, or salt water.

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

### 4. Specification Requirements

4.1 The properties of fabrics for knitted swimwear 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.

5.2 It is recognized that for purposes of fashion or aesthetics the ultimate consumer of articles made from these fabrics may find acceptable fabrics that do not conform to all of the requirements in Table 1. Therefore, one or more of the requirements listed in Table 1 may be modified by mutual agreement between the purchaser and the seller.

5.2.1 In such cases, any references to the specification shall specify that: “This fabric meets ASTM Specification D 3996 except for the following characteristic(s).”

5.3 Where no repurchase agreement has been reached

<sup>5</sup> Available from Superintendent of Documents, Government Printing Office, Washington, DC 20407.