



Designation: **D4115 – 14 D4115 – 20**

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

This standard is issued under the fixed designation D4115; 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 woven and knitted fabrics comprised of any textile fiber or mixture of fibers to be used in women's and girls' dress gloves.

1.2 This performance specification is not applicable to fabrics used for interlinings and industrial-protective clothing.

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

1.4 The following ~~precautionary~~ precautionary statement pertains only to the test methods portion, Section 7, of this performance 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~~ safety, health, and health ~~environmental~~ environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *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:*<sup>2</sup>

[D123 Terminology Relating to Textiles](#)

[D434 Test Method for Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam \(Withdrawn 2003\)](#)<sup>3</sup>

[D1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum \(Elmendorf-Type\) Apparatus](#)

[D2261 Test Method for Tearing Strength of Fabrics by the Tongue \(Single Rip\) Procedure \(Constant-Rate-of-Extension Tensile Testing Machine\)](#)

[D2262 Test Method for Tearing Strength of Woven Fabrics by the Tongue \(Single Rip\) Method \(Constant-Rate-of-Traverse Tensile Testing Machine\) \(Withdrawn 1995\)](#)<sup>3</sup>

[D2724 Test Method for Bond Strength of Bonded, Fused, and Laminated Apparel Fabrics](#)

[D3786 Test Method for Bursting Strength of Textile Fabrics—Diaphragm Bursting Strength Tester Method](#)

[D3787 Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse \(CRT\) Ball Burst Test](#)

[D5034 Test Method for Breaking Strength and Elongation of Textile Fabrics \(Grab Test\)](#)

[D7022 Terminology Relating to Apparel](#)

2.2 *AATCC Test Methods:*<sup>4</sup>

[8TM8 Colorfastness to Crocking: Crockmeter Method](#)

[16:3TM16.3 Colorfastness to Light: Xenon-Arc](#)

[23TM23 Colorfastness to Burnt Gas Fumes](#)

[61TM61 Colorfastness to Laundering, Commercial: Accelerated](#)

[H6TM116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method](#)

[132TM132 Colorfastness to Drycleaning](#)

[135TM135 Dimensional Changes of Fabrics after Home Laundering](#)

<sup>1</sup> This performance specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.61 on Apparel. Current edition approved Feb. 1, 2014/February 2020. Published March 2014/February 2020. Originally approved in 1982. Last previous edition approved in 2008/2014 as D4115 – 02D4115 – 14. (2008). DOI: 10.1520/D4115-14.10.1520/D4115-20.

<sup>2</sup> 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.

<sup>3</sup> The last approved version of this historical standard is referenced on www.astm.org.

<sup>4</sup> Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709, http://www.aatcc.org.

~~172~~[TM172](#) Colorfastness to Powdered Non-chlorine Bleach in Home Laundering  
~~188~~[TM188](#) Colorfastness to Sodium Hypochlorite Bleach in Home Laundering  
~~Evaluation Procedure No. 1~~[EP1](#) Gray Scale for Color Change  
~~Evaluation Procedure No. 2~~[EP2](#) Gray Scale for Staining  
~~Evaluation Procedure No. 8~~[EP8](#) AATCC 9-Step Chromatic Transference Scale.  
[M11](#) A Glossary of AATCC Standard Terminology

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

16 CFR 1610 Standard for Flammability of Clothing Textiles

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 edition of each test method cited shall prevail.

### 3. Terminology

3.1 For all terminology related to Apparel, see Terminology [D7022](#).

3.1.1 The following terms are relevant to this standard: dress glove.

3.2 For definitions of all other textile terms see Terminology [D123](#).

3.3 For terms relating to chemical or colorfastness testing, refer to specific AATCC test methods, or the glossary of AATCC Standard Terminology, or both.

3.4 Definitions found in a dictionary of common terms are suitable for terms used in this performance specification.

### 4. Specification Requirements

4.1 The properties of knitted and woven fabrics for women's and girls' dress gloves shall conform to the specification requirements in [Table 1](#).

### 5. Significance and Use

5.1 Upon agreement between the purchaser and the supplier, fabrics intended for this end use should meet all of the requirements listed in [Table 1](#) of this performance 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 upon agreement between the purchaser and the supplier.

5.2.1 In such cases, any references to the specification shall specify that, "This fabric meets ASTM Specification D4115 except for the following characteristic(s)."

5.3 Where no prepurchase agreement has been reached between the purchaser and the supplier, and in case of controversy, the requirements listed in [Table 1](#) are intended to be used as a guide only. As noted in [5.2](#), ultimate consumer demands dictate varying performance parameters for any particular style of fabric.

5.4 The significance and use of particular properties and methods are discussed in the appropriate sections of the specified methods.

### 6. Sampling

6.1 *Lot Sample*—As a lot sample for acceptance testing, take at random the number of rolls as directed in an applicable specification or other agreement between the purchaser and the supplier, such as an agreement to use MIL-STD-105D.

6.2 *Laboratory Sample*—From each roll or piece in the lot sample, cut two laboratory samples the full width of the fabric and at least 375 mm (15 in.) along the selvage.

### 7. Test Methods (see [Note 1](#) in [Table 1](#) and [Note 12](#))

7.1 *Breaking Force* (woven fabrics only)—Determine the dry breaking force in the standard atmosphere for testing textiles as directed in Test Method [D5034](#), using a constant rate of traverse (CRT) tensile-testing machine with the speed of the pulling clamp at  $300 \pm 10$  mm ( $12 \pm 0.5$  in.)/min.

NOTE 2—If preferred, the use of a constant-rate-of-extension (CRE) tensile-testing machine may be used. The crosshead speed should be as agreed upon between the purchaser and the supplier. There may be no overall correlation between the results obtained with the CRT machine and with the CRE

<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.