



Standard Specification for Vinyl-Coated Glass Yarns¹

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1. Scope *

1.1 This specification covers vinyl-coated glass yarns. These yarns are manufactured in two basic classes. These classes have been established that when properly woven into screening, satisfactory strength, durability, and insect protection are obtained. The two classes are as follows:

1.1.1 *Class 1*—Nominal thickness 0.292 mm (0.0115 in.).

1.1.2 *Class 2*—Nominal thickness 0.330 mm (0.0130 in.).

1.2 The values stated in either SI or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with this specification.

1.3 The following precautionary statement pertains only to the test method portions, Sections 12–21, 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 Textiles²

D 578 Specification for Glass Fiber Strands²

D 885 Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made From Man-Made Organic-Base Fibers²

D 1776 Practice for Conditioning and Testing Textiles²

D 1907 Test Method for Yarn Number by the Skein Method²

D 2256 Test Method for Tensile Properties of Yarns by the Single-Strand Method²

D 4329 Practice for Fluorescent UV Exposure of Plastics³

D 4909 Test Method for Color Stability of Vinyl-Coated Glass Textiles to Accelerated Weathering⁴

D 4963 Test Method for Ignition Loss of Glass Strands and Fabrics⁵

2.2 ANSI/ASQC Standards:

ANSI/ASQC Z1.4 Sampling Procedures for Inspection by Attributes⁶

ANSI/ASQC Z1.9 Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming⁶

2.3 Federal Standard:

CCC-D-950 Specification, Dyeing and After Treating Processes for Cotton Cloths⁷

2.4 AATCC Standard:

Evaluation Procedure 1, Gray Scale for Color Change⁸

3. Terminology

3.1 Definitions:

3.1.1 *moisture equilibrium, n*—the condition reached by a material when it no longer takes up moisture from, or gives up moisture to, the surrounding atmosphere.

3.1.2 *vinyl-coated glass yarn, n*—glass continuous filament yarn, coated with a pigment and plasticized vinyl chloride resin.

3.1.3 For terminology of other textile terms used in this specification, refer to Terminology D 123.

4. Sampling and Number of Specimens

4.1 *Lot Sample*—As a lot sample for acceptance testing, take at random the number of yarn packages directed in an applicable material specification or other agreement between the purchaser and the supplier. Consider yarn packages to be the primary sampling unit. In the absence of such agreement, proceed as follows:

4.1.1 *Yarn Number, Ignition Loss, and Strength*—Take the number of yarn packages specified in ANSI/ASQZ Z1.9 using the count of yarn packages in the lot as a measure of the lot size.

4.1.2 *Color and Workmanship*—Take the number of yarn packages specified in ANSI/ASQZ Z1.4 using the count of yarn packages in the lot as a measure of the lot size.

¹ This specification is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.18 on Glass Fiber and Its Products.

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

³ *Annual Book of ASTM Standards*, Vol 08.03.

⁴ Discontinued— See 1995 *Annual Book of ASTM Standards*, Vol 07.02.

⁵ *Annual Book of ASTM Standards*, Vol 07.02.

⁶ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

⁷ Available from General Services Administration, Specification and Consumer Information Distribution Section (WFSIS), Washington Navy Yard, Bldg. 197, Washington, DC 20407.

⁸ Available from American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.

*A Summary of Changes section appears at the end of this standard.