

# Standard Terminology Relating to Glass Fiber and Its Products<sup>1</sup>

This standard is issued under the fixed designation D7018/D7018M; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This standard is a compilation of terminology developed by Committee D13.18 on Glass Fiber and its Products.

1.2 This terminology is unique to glass fibers, strands, yarns, fabrics, etc. in the glass textile industry. Terms that are generally understood or adequately defined in other readily available sources are not included.

1.3 The values stated in either SI units 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 non-conformance with the standard.

1.4 Subcommittee D13.18 has jurisdictional responsibility for standards and terminology in this standard. Any change in wording requires the approval of D13.18 subcommittee. Any changes approved by the subcommittee and main committee are then directed to subcommittee D13.92 on Terminology for inclusion in Terminology D123.

#### 2. Referenced Documents

- 2.1 ASTM Standards:<sup>2</sup>
- D578 Specification for Glass Fiber Strands
- D579 Specification for Greige Woven Glass Fabrics
- D580 Specification for Greige Woven Glass Tapes and Webbings
- D581 Specification for Glass Fiber Greige Braided Tubular Sleeving
- D3374 Specification for Vinyl-Coated Glass Yarns
- D3656 Specification for Insect Screening and Louver Cloth Woven fromVinyl-Coated Glass Yarns
- D4028 Specification for Solar Screening Woven from Vinyl-Coated Fiber Glass Yarn

# D4029 Specification for Finished Woven Glass Fabrics

- D4030 Specification for Glass Fiber Cord and Sewing Thread
- D4389 Specification for Finished Glass Fabrics Woven From Rovings
- D4912 Test Method for Fabric Stability of Vinyl-Coated Glass Yarn Insect Screening and Louver Cloth
- D4963 Test Method for Ignition Loss of Glass Strands and Fabrics

## 3. Terminology

3.1 *Definitions*: Alphabetical listing of terms for which Subcommittee D13.18 has jurisdiction:

atmosphere for testing textiles, *n*—for glass, air maintained at a relative humidity of at least 48 % and no greater than 67 %, and at a temperature of at least 20°C [68°F] and no greater than  $25^{\circ}$ C [77°F].

DISCUSSION—(as related to all D13.18 standards)—Glass textiles are used in various products such as reinforced plastics, mat-like material, tire cords, electrical insulation, etc. Each of these materials require different testing atmospheres. It is the intent of this wide spread in testing atmosphere to allow testing of glass textiles in respective laboratories where end product test atmosphere requirements differ. The test atmospheres for respective products should be controlled as specified in Specification E171. It is the opinion of Subcommittee D13.18 that the physical properties cited in respective specifications would not be affected by the range selected. In any event, the test atmosphere should be stated in the report.

- **blocking**, *n—of coated fiber glass yarn solar screening*, an undesired adhesion between touching layers of a material. Such as occurs under moderate pressure, during storage or use.
- **braid**, *n*—a narrow tubular or flat fabric produced by intertwining a single set of yarns according to a definite pattern (Maypole process).
- **carrier**, *n*—*in braiding machinery*, that part of a braiding machine that holds the package of yarn, thread, or cord, and carries the yarn when the machine is operated.
- **chopped strand**, *n*—*in glass textiles*, a strand made for short predetermined lengths of cut continuous filament and used as a reinforcing material. (See also **strand**.)

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.18 on Glass Fiber and its Products.

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<sup>&</sup>lt;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.