



Designation: D 4158 – 9201

Standard Test Method Guide for Abrasion Resistance of Textile Fabrics (Uniform Abrasion Method) Abrasion)¹

This standard is issued under the fixed designation D 4158; 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 (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 ~~This test method guide covers the determination of the resistance to abrasion of a wide range of textile materials using the uniform abrasion testing instrument. Fabrics of all types including carpets, garments and nonwovens may be tested under this method.~~

NOTE 1—Other procedures for measuring the abrasion resistance of textile fabrics are given in: Test Methods D 3884, D 3885, D 3886, D 4157, D 4966, and AATCC Test Method 93.

1.1.1 Provisions are provided for testing specimens in dry and wet conditions. Four options for evaluation are included:

- Option 1—Fabric Rupture
- Option 2—Mass Loss
- Option 3—Thickness Loss
- Option 4—Breaking Strength Loss

1.1.2 Provision is provided for testing specimens in the wet state.

1.2 ~~The values stated in either SI units or inch-pound units are to be regarded separately as standard; the values in English standard. Within the text, the inch-pound units are provided as information only and are shown in parentheses. 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 the specification.~~

1.3 ~~This standard guide does not purport to address all of the safety problems, 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:*

¹ This method is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.60 on Fabric Test Methods, Specific. Current edition approved ~~June 15, 1992; Feb. 10, 2001.~~ Published ~~August 1992; May 2001.~~ Originally published as D 4158 – 82. Last previous edition D 4158 – 892.