



Designation: D2057 – 05

## Standard Test Method for Colorfastness of Zippers to Laundering<sup>1</sup>

This standard is issued under the fixed designation D2057; 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 test method covers the determination of alteration in shade and of staining under conditions similar to that experienced in domestic washing of zipper stringers. This test method is applicable to the textile portion of zipper stringers that utilize tapes made of cotton, linen, or manufactured organic fibers, and to combinations thereof.

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

1.3 *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:*<sup>2</sup>

D123 Terminology Relating to Textiles

D2050 Terminology Relating to Subassemblies

D2051 Test Method for Durability of Finish of Zippers to Laundering

D2052 Test Method for Colorfastness of Zippers to Dry-cleaning

D2053 Test Method for Colorfastness of Zippers to Light

D2054 Test Method for Colorfastness of Zipper Tapes to Crocking

D2058 Test Method for Durability of Finish of Zippers to Drycleaning

D2059 Test Method for Resistance of Zippers to Salt Spray (Fog)

D2060 Test Methods for Measuring Zipper Dimensions

D2061 Test Methods for Strength Tests for Zippers

D2062 Test Methods for Operability of Zippers

D3692 Practice for Selection of Zippers for Care-Labeled Apparel and Household Furnishings

2.2 *AATCC Methods:*

Method 143 Appearance of Apparel and Other Textile End Products after Repeated Home Launderings<sup>3</sup>

Evaluation Procedure 1, AATCC Gray Scale for Color Change<sup>3</sup>

Evaluation Procedure 3, AATCC Chromatic Transference Scale<sup>3</sup>

### 3. Terminology

3.1 For all terminology related to D13.54, Subassemblies, refer to Terminology D2050.

3.2 For all other terminology used in this standard, see Terminology D123.

### 4. Summary of Test Method

4.1 Specimens in contact with a multifiber test cloth are laundered in home laundry and drying equipment, with or without bleach, under appropriate temperature conditions to produce the effect of home laundering on zipper color. The alteration in shade and the degree of staining of the multifiber test cloth are graded by reference to the AATCC Gray Scale or to the AATCC Chromatic Transference Scale, as appropriate.

### 5. Significance and Use

5.1 Test Method D2057 is useful for testing to determine if the degree of alteration in shade is satisfactory for the intended end-use and for determining if unacceptable staining of color into adjacent fabric will occur.

NOTE 1—For guidance in evaluating the results of this method, refer to Practice D3692.

5.2 This test method is considered satisfactory for acceptance testing of commercial shipments because the method has been used extensively in the trade for acceptance testing.

5.2.1 If there are differences of practical significance between reported test results for two laboratories (or more), comparative tests should be performed to determine if their is

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee D13 on Textiles; and is the direct responsibility of Subcommittee D13.54 on Subassemblies. The method was developed in cooperation with the Slide Fastener Association, Inc.

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