



Designation: D5375/D5375M – 98 (Reapproved 2019)

Standard Test Methods for Liner Removal at High Speeds from Pressure-Sensitive Label Stock¹

This standard is issued under the fixed designation D5375/D5375M; 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 These test methods cover the measurement of the adherence of the release liner to the adhesive of a pressure-sensitive adhesive label.

1.2 These test methods provide means of assessing the uniformity of the adhesion to the liner of a given type of pressure-sensitive label. The assessment may be within a sheet or roll between sheets or rolls or between production lots.

1.3 Variation in the label backing, liner, liner release coating, adhesive, and adhesive coating weight, affect the response. Therefore, these methods cannot be used to pinpoint the specific cause(s) of nonuniformity.

1.4 These test methods may not be appropriate to test labels having either relatively stiff backings or stiff liners, or backings showing high stretch at low forces. These characteristics will result in a high variability of the test response that is not a true indication of the real nature of the adhesive bond.

1.5 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 must be used independently, without combining values in any way.

1.6 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.7 *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.*

¹ These test methods are under the jurisdiction of ASTM Committee D10 on Packaging and are the direct responsibility of Subcommittee D10.14 on Tape and Labels.

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2. Referenced Documents

2.1 ASTM Standards:²

D996 Terminology of Packaging and Distribution Environments

D3715/D3715M Practice for Quality Assurance of Pressure-Sensitive Tapes

D4332 Practice for Conditioning Containers, Packages, or Packaging Components for Testing

E122 Practice for Calculating Sample Size to Estimate, With Specified Precision, the Average for a Characteristic of a Lot or Process

3. Terminology

3.1 Definitions:

3.1.1 General definitions for packaging and distribution environments are in accordance with Terminology D996.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *pressure-sensitive label*—the combination of face material, pressure-sensitive adhesive, and liner.

3.2.1.1 *Discussion*—The adhesive is permanently tacky and instantly adheres to whatever surface the label is designed for. Also, defined as a self-adhering label.

4. Summary of Test Methods

4.1 *Test Method A*—The label stock is adhered to a rigid platform with double-coated tape with the liner side up. The liner is peeled from the adhesive at a specific rate. The liner is peeled back over itself at 180° angle.

4.2 *Test Method B*—The label stock is adhered to a rigid platform with double-coated tape with the liner side up. The liner is peeled from the adhesive at a specified rate. The liner is peeled from the label stock at an angle of 90° to the stock.

5. Significance and Use

5.1 These test methods are a tool for development and quality assurance use. Given a specific pressure-sensitive label and liner and a requirement in terms of the minimum for

² 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.