



Designation: D6195 – 03 (Reapproved 2019)

Standard Test Methods for Loop Tack¹

This standard is issued under the fixed designation D6195; 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 determination of properties of a pressure-sensitive adhesive. These test methods are applicable to those adhesives that form a bond of measurable strength rapidly upon contact with another surface. Tack force may be measured as the force required to separate the adhesive from the adherend at the interface shortly after they have been brought into contact under a load equal only to the weight of the pressure-sensitive article (for example, tape, label, sticker, etc.) on a 1 in.² contact area.

1.2 The following test methods are included:

1.2.1 *Test Method A* (using Tensile Tester), and

1.2.2 *Test Method B* (using Loop Tack Tester).

1.3 The values stated in inch-pound units are to be regarded as the standard because the industry standard width for pressure-sensitive tape is 1 inch. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *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.*

1.5 *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.*

2. Referenced Documents

2.1 *ASTM Standards*:²

A666 Specification for Annealed or Cold-Worked Austenitic

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 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.

Stainless Steel Sheet, Strip, Plate, and Flat Bar

D907 Terminology of Adhesives

D2651 Guide for Preparation of Metal Surfaces for Adhesive Bonding

E4 Practices for Force Verification of Testing Machines

E171 Practice for Conditioning and Testing Flexible Barrier Packaging

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

2.2 *European Association for the Pre-Adhesed Labeling Industry (FINAT) Standard*:³

FTM 9 “Quick-Stick” Tack Measurement

2.3 *Tag and Label Manufacturers Institute, Inc. (TLMI) Standard*:⁴

L-IB1 TLMI Loop Tack Test

L-IB2 Tensile Tester Loop Tack Test

3. Terminology

3.1 *Definitions*:

3.1.1 Many of the terms found in these test methods are defined in Terminology D907.

4. Summary of Test Method

4.1 These test methods involve allowing a loop of pressure-sensitive adhesive with its backing to be brought into controlled contact with a 1 in.² (25 by 25 mm) surface of stainless steel, with the only force applied being the weight of the pressure-sensitive article itself. The pressure-sensitive article is then removed from the substrate, with the force to remove the pressure-sensitive article from the adherend measured by a recording instrument.

4.2 *Test Method A* (using a Tensile Tester) applies when a Tensile Tester is used to measure loop tack and involves the use of a loop prepared from an 7 in. (175 mm) specimen strip.

³ Available from FINAT, Laan van Nieuw-Oost Indië 131-G 2593 BM, The Hague, P.O. Box 85612, 2508 CH The Hague, The Netherlands, <http://www.finat.com>.

⁴ Available from TLMI, 6 Main St., Milford, OH 45150, <https://www.tlmi.com/home>.