

Tentative Method of Test for ADHESIVENESS OF GUMMED TAPE¹



A.S.T.M. Designation: D 773 - 44 T

ISSUED, 1944.²

This Tentative Method has been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia 3, Pa.

Scope

1. This method covers the procedure for determining the adhesiveness of gummed sealing tape not less than 2 in. in width, used for sealing shipping containers, when tested under the conditions specified herein.

NOTE.—The test results are indicative of how well the tape will adhere and whether it will adhere with satisfactory rapidity in the sealing operation. The results do not necessarily indicate how a given tape will behave when stuck to other surfaces than the Kraft paper specified, nor how well it will maintain its adhesiveness over a period of time.

Apparatus

2. The testing apparatus shall be the Harnden-McLaurin gummed tape tester which consists of the following:

(a) Two adjacent platens in the same

horizontal plane forming a table-like top divided in the center and balanced, and so pivoted that, on releasing them, the adjacent edges tilt upward and apart.

(b) A means for actuating the platens.

(c) A means of holding the test paper firmly in place on top of the platens with a tilting clamp across each platen, the front edge of each clamp being 2 in. from and parallel to the division between the platens.

(d) A scale with pointer for registering the retardation of the swing of the platens which results from the resistance of the gum of the tape.

(e) A roll-feed, lever-operated moistener for moistening the gum. The moistener shall have a single brush set in a pan of water so constructed as to maintain a constant water level. The depth of the water shall be not less than 1 in., and the brush shall extend 1.7 in. (43 mm.) above the surface of the water.

(f) A motor-driven roller with automatic timing for pressing the test specimen on the test paper. It shall be made of iron, 3½ in. in width, 4½ in. in diameter, having a covering of sponge rubber ¼ in. in thickness on the circumferential surface, and shall weigh 16½ lb.

¹ Under the standardization procedure of the Society, this method is under the jurisdiction of the A.S.T.M. Committee D-6 on Paper and Paper Products.

For further information on this method the following references should be consulted:

George H. Harnden, "Determining the Adhesive Strength of Gummed Tape," ASTM BULLETIN, Am. Soc. Testing Mats., No. 98, May, 1939, p. 23.

C. G. Weber, "Testing the Adhesive Strength of Gummed Paper Sealing Tape," Modern Packaging, Vol. 15, No. 4, December, 1941, p. 66.

² Accepted by the Society at annual meeting, June, 1944.