



Standard Method of Test for
**TENSILE PROPERTIES OF THIN PLASTIC SHEETING
USING THE INCLINED PLANE TESTING MACHINE¹**



ASTM Designation: D 1923 - 67

ADOPTED, 1967

This Standard of the American Society for Testing and Materials is issued under the fixed designation D 1923; 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.

Scope

1. This method² covers the determination of tensile properties of plastics in the form of thin sheeting less than 1.0 mm (0.04 in.) in thickness (Note 1). This method employs an inclined plane weighing head to measure the load applied to break the specimen. The angle of inclination of the tilting table on which the loaded carriage moves to apply the load to the specimen is changed to give a constant rate of load application to the specimen. The rate of grip separation varies, being dependent on the elonga-

tion characteristics of the specimen under test (Note 2).

NOTE 1.—Tensile properties of plastics 1.0 mm (0.04 in.) or greater in thickness shall be determined according to the Method of Test for Tensile Properties of Plastics (ASTM Designation: D 638)³ if rigid, and according to the Method of Tension Testing of Vulcanized Rubber (ASTM Designation: D 412)³ if nonrigid or semirigid. If the sample quantity is limited, the Method of Test for Tensile Properties of Plastics by Use of Microtensile Specimens (ASTM Designation: D 1708)³ may be used.

NOTE 2.—The Methods of Test for Tensile Properties of Thin Plastic Sheeting (ASTM Designation: D 882)³ describes two types of tension tests for thin plastic sheeting differing in manner of load application:

Method A. Static Weighing—Constant-Rate-of-Grip Separation Test, and

Method B. Pendulum Weighing—Constant-Rate-of-Powered-Grip Motion Test.

Methods D 882 also include a procedure for tensile modulus of elasticity at one strain rate. This procedure is the recommended modulus measurement technique.

³ Appears in this publication.

¹ Under the standardization procedure of the Society, this method is under the jurisdiction of the ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee I on Mechanical Properties. A list of committee members may be found in the ASTM Year Book.

² This test method was formerly Method C of the Methods of Test for Tensile Properties of Thin Plastic Sheets and Films (ASTM Designation: D 882 - 56 T).