



Designation: D 618 – 9900

An American National Standard

Standard Practice for Conditioning Plastics for Testing¹

This standard is issued under the fixed designation D 618; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 In general, the physical and electrical properties of plastics are influenced by temperature and relative humidity in a manner that materially affects test results. In order that reliable comparisons may be made of different materials and between different laboratories, it is necessary to standardize the humidity conditions, as well as the temperature, to which specimens of these materials are subjected prior to and during testing. This practice defines procedures for conditioning plastics (although not necessarily to equilibrium) prior to testing, and the conditions under which they shall be tested.

1.2 For some materials, there may be a material specification that requires the use of this practice, but with some procedural modifications. The material specification takes precedence over this practice. Refer to the material specification before using this practice. Table 1 in Classification D 4000 lists the ASTM material specifications that currently exist.

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.*

NOTE 1—ISO 291 is related to this practice; however, ISO 291 describes only two temperature and humidity conditions for conditioning or testing, or both.

2. Referenced Documents

2.1 ASTM Standards:

D 709 Specification for Laminated Thermosetting Materials²

¹ This practice is under the jurisdiction of ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee D20.50 on Permanence Properties. Current edition approved Nov. 10, 1999. Published February 2000. Published January 2001. Originally published as D 618 – 41. Last previous edition D 618 – 969.

*A Summary of Changes section appears at the end of this standard.