



Standard Specification for Molding Compounds, Thermosetting¹

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ε¹ NOTE—Editorially added three ASTM practices to the Referenced Documents section, as well as in paragraph 7.1.3 in November 2002.

1. Scope *

1.1 This specification covers the basic properties of thermoset molding compounds and the test methods used to establish the properties.

1.2 *Classification*—Molding thermosetting plastic compounds shall be of the following resins and are covered by the individual specification sheets (see 5.1 and Annex A1-Annex A8).

Resin
Phenolic, cellulose filled
Phenolic, mineral/glass filled
Melamine
Polyester
Diallyl iso-phthalate
Diallyl ortho-phthalate
Silicone
Epoxy

NOTE 1—There is no equivalent ISO standard.

1.3 *Order of Precedence*—In the event of a conflict between the text of this specification and the references cited in Section 2 (except for related specification sheets), the text of this specification takes precedence. Nothing in this specification, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

1.4 The values stated in SI units are to be considered standard.

2. Referenced Documents

2.1 ASTM Standards:

- D 149 Test Methods for Dielectric Breakdown Voltage and Dielectric Strength of Electrical Insulating Materials at Commercial Power Frequencies²
- D 150 Test Methods for A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation²
- D 229 Test Methods for Rigid Sheet and Plate Materials

- Used for Electrical Insulation²
- D 256 Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics²
- D 495 Test Method for High-Voltage, Low-Current, Dry Arc Resistance of Solid Electrical Insulation²
- D 570 Test Method for Water Absorption of Plastics²
- D 618 Practice for Conditioning Plastics for Testing²
- D 638 Test Method for Tensile Properties of Plastics²
- D 648 Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position²
- D 695 Test Method for Compressive Properties of Rigid Plastics²
- D 790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials²
- D 796 Practice for Compression Molding Test Specimens of Phenolic Molding Compounds³
- D 883 Terminology Relating to Plastics²
- D 1896 Practice for Transfer Molding Test Specimens of Thermosetting Compounds²
- D 3419 Practice for In-Line Screw-Injection Molding Test Specimens from Thermosetting Compounds⁴
- D 3636 Practice for Sampling and Judging Quality of Solid Electrical Insulating Materials⁵
- D 3638 Test Method for Comparative Tracking Index of Electrical Insulating Materials⁵
- D 4350 Test Method for Corrosivity Index of Plastics and Fillers⁶
- D 4697 Guide for Maintaining Test Methods in the User's Laboratory⁷
- E 994 Guide for Calibration and Testing Laboratory Accreditation Systems General Requirements for Operation and Recognition⁸
- E 1224 Guide for Categorizing Fields of Capability for

¹ This specification is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.16 on Thermosetting Materials.

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² *Annual Book of ASTM Standards*, Vol 08.01.

³ Discontinued; see 1992 *Annual Book of ASTM Standards*, Vol 08.01. Replaced by Practice D 5224.

⁴ *Annual Book of ASTM Standards*, Vol 08.02.

⁵ *Annual Book of ASTM Standards*, Vol 10.02.

⁶ *Annual Book of ASTM Standards*, Vol 08.03.

⁷ *Annual Book of ASTM Standards*, Vol 07.02.

⁸ *Annual Book of ASTM Standards*, Vol 14.02.

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

