



Designation: D1201 – 13 (Reapproved 2022)^{ε 1}

Standard Specification for Thermosetting Polyester Molding Compounds¹

This standard is issued under the fixed designation D1201; 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.

^{ε 1} NOTE—Reapproved with editorial changes in January 2022.

1. Scope*

1.1 This specification covers compression molding, thermosetting, unsaturated polyester molding compounds as further defined in 3.1.

1.2 The values stated in SI units are to be regarded as the standard.

NOTE 1—The properties included in this specification are those required to identify the types of molding compounds covered. There may be other requirements necessary to identify particular characteristics. These will be added to the specification as their inclusion becomes generally desirable and the necessary test data and methods become available.

NOTE 2—ISO 3672-1: 1979(E) is similar but not equivalent to this specification. Product classification and characterization are not equivalent.

1.3 *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

D256 Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics

D495 Test Method for High-Voltage, Low-Current, Dry Arc Resistance of Solid Electrical Insulation

D570 Test Method for Water Absorption of Plastics

D618 Practice for Conditioning Plastics for Testing

D790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials

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 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.

D792 Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement

D3892 Practice for Packaging/Packing of Plastics

2.2 *ISO Standard:*

ISO 3672-1: 1979(E) Plastics—Unsaturated Polyester Resins—Part 1: Designation³

3. Classification

3.1 This specification covers the following types of polyester molding compounds:

3.1.1 *Type 1*—General-purpose, granular material with mineral fillers.

3.1.2 *Type 2*—General-purpose, granular material with mineral and cellulosic fillers, and having improved mechanical strength.

3.1.3 *Type 3*—General-purpose, putty-type material with mineral fillers.

3.1.4 *Type 4*—Putty-type material with mineral fillers having superior electrical properties.

3.1.5 *Type 5*—High-impact, glass-fiber filled material in mat form having good electrical properties.

3.1.6 *Type 6*—High-impact, glass-fiber filled material in putty form.

4. General Requirements

4.1 The molding compounds shall be of uniform composition, so compounded as to conform to the requirements prescribed in this specification.

4.2 The apparent density, bulk factor, particle size, physical form, and color of the compound shall be as agreed upon between the purchaser and supplier.

NOTE 3—The terms “apparent density,” “bulk factor,” and “particle size” cannot be used in the same sense with putty-type and glass-filled materials as with granular materials.

5. Detail Requirements

5.1 Test specimens, molded by compression under conditions specified by the manufacturer, shall conform to the requirements prescribed in Table 1.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

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