

Tentative Specifications for

POLYSTYRENE MOLDING COMPOUNDS¹



A.S.T.M. Designation: D 703 - 44 T

ISSUED, 1943; REVISED, 1943, 1944.²

These Tentative Specifications have 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. These specifications cover thermoplastic polystyrene molding compounds for use particularly in the injection molding process.

NOTE.—The properties included in these specifications 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 specifications as their inclusion becomes generally desirable and the necessary test data and methods become available.

Types

2. These specifications cover the following three types of polystyrene molding compounds:

Type 1.—A general purpose compound consisting of an unmodified form of polystyrene (polyvinyl benzene) with or without the addition of pigments, colors, and lubricants as may be required.

Type 2.—A superior electrical purpose compound consisting of an unmodified form of polystyrene (polyvinyl benzene) which may contain small amounts of lubricants intended to facilitate removal of molded objects from the mold.

Type 3.—A general purpose molding material characterized by superior heat-resistant qualities.

General Requirements

3. (a) The molding compound shall be of uniform composition and so compounded as to conform to the requirements prescribed in these specifications.

(b) The particle size (Note) and color shall be as specified by the purchaser in the contract or order.

NOTE.—Polystyrene molding compounds are generally supplied in a granular size of the following sieve analysis:

Retained on $\frac{3}{8}$ -in. sieve	none
Passing No. 14 (1410-micron) sieve	not over 6 per cent

(c) The material covered by type 3 of these specifications shall consist of polystyrene compound, with halogenated polynuclear aromatic hydrocarbons of the type and quantity necessary to confer the specified properties.

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee D-20 on Plastics.

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² Latest revision accepted by Committee E-10 on Standards, January 1, 1944.