



AMERICAN SOCIETY FOR TESTING AND MATERIALS



Reproduced By GLOBAL ENGINEERING DOCUMENTS
 IHS Under License With ASTM
 Copyright American Society For Testing And Materials
 1915 Race Street, Philadelphia, Pennsylvania 19103

Standard Specification for POLYCARBONATE PLASTIC MOLDING, EXTRUSION, AND CASTING MATERIALS¹

This standard is issued under the fixed designation D 2473; 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.

1. Scope

1.1 This specification covers plastic molding and extrusion materials consisting of polycarbonate resin made from bisphenol and containing, as required, minor amounts of colorants and additives.

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

2. Applicable Documents

2.1 ASTM Standards:

- D 256 Test for Impact Resistance of Plastics and Electrical Insulating Materials²
- D 618 Conditioning Plastics and Electrical Insulating Materials for Testing²
- D 648 Test for Deflection Temperature of Plastics Under Flexural Load²
- D 1238 Test for Measuring Flow Rates of Thermoplastics by Extrusion Plastometer²
- D 1897 Recommended Practice for Injection Molding Test Specimens of Thermoplastic Molding and Extrusion Materials²
- D 1898 Recommended Practice for Sampling of Plastics²
- D 3892 Practice for Packaging/Packing of Plastics²

2.2 Military Standard:

- MIL-STD-105 Sampling Procedures and Tables for Inspection by Attributes³

3. Classification

3.1 Polycarbonate materials are classified in accordance with Table 1. An identifying number for specifying a material is made up of four digits using the cell numbers for each of the properties in the order in which they are listed in Table 1.

NOTE 1—An example of the use of this classification for specifying a typical polycarbonate molding material is as follows:

	Cell No.
Flow rate, g/10 min, 6.0 to 8.9	5
Impact strength, J/m (ft-lbf/in.) of notch	
1/8-in. specimen, 12 min	2
1/8-in. specimen, 2 min	2
Deflection temperature at 1820 kPa (264 psi)	2
128°C (262°F) min	

or polycarbonate 5222. Where no requirement exists or is needed, a zero value shall be used, for example polycarbonate 5202 where no requirement is necessary for the impact strength of a 1/8-in. specimen.

3.2 Although the values listed are necessary to include the range of properties available in existing materials, they should not be interpreted as implying that every possible combination of the properties exists or can be obtained commercially.

4. General Requirements

4.1 The materials herein described shall be uniform and shall conform to the requirements listed in Table 1.

4.2 The color and form of the material shall be as agreed upon by the seller and the purchaser.

4.3 By agreement between the purchaser and the seller, supplementary properties selected from Appendix X1 may be specified.

¹ This specification is under the jurisdiction of ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee D 20.15 on Thermoplastic Materials.

Current edition approved June 26, 1981. Published October 1981. Originally published as D 2473 - 66 T. Last previous edition D 2473 - 78.

² Annual Book of ASTM Standards, Part 35.

³ Available from Naval Publications and Forms Center, 5801 Tabor Ave., Philadelphia, Pa. 19120.