



Standard Specification for Polyethylene Plastics Pipe and Fittings Materials¹

This standard is issued under the fixed designation D3350; 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 the identification of polyethylene plastic pipe and fittings materials in accordance with a cell classification system. It is not the function of this specification to provide specific engineering data for design purposes, to specify manufacturing tolerances, or to determine suitability for use for a specific application.

1.2 Polyethylene plastic materials, being thermoplastic, are reprocessible and recyclable (**Note 2**). This specification allows for the use of those polyethylene materials, provided that all specific requirements of this specification are met.

NOTE 1—The notes in this specification are for information only and shall not be considered part of this specification.

NOTE 2—See Guide **D5033** for information and definitions related to recycled plastics.

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

1.4 *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 3—There is no known ISO equivalent to this standard.

1.5 For information regarding molding and extrusion materials see Specification **D4976**. For information regarding wire and cable materials see Specification **D1248**.

2. Referenced Documents

2.1 ASTM Standards:²

- D618** Practice for Conditioning Plastics for Testing
- D638** Test Method for Tensile Properties of Plastics
- D746** Test Method for Brittleness Temperature of Plastics and Elastomers by Impact

¹ This specification is under the jurisdiction of ASTM Committee **D20** on Plastics and is the direct responsibility of Subcommittee **D20.15** on Thermoplastic Materials.

Current edition approved Nov. 1, 2014. Published December 2014. Originally approved in 1974. Last previous edition approved in 2012 as D3350 – 12^{e1}. DOI: 10.1520/D3350-14.

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.

- D790** Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- D792** Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
- D883** Terminology Relating to Plastics
- D1238** Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
- D1248** Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable
- D1505** Test Method for Density of Plastics by the Density-Gradient Technique
- D1603** Test Method for Carbon Black Content in Olefin Plastics
- D1693** Test Method for Environmental Stress-Cracking of Ethylene Plastics
- D1898** Practice for Sampling of Plastics (Withdrawn 1998)³
- D2837** Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products
- D2839** Practice for Use of a Melt Index Strand for Determining Density of Polyethylene
- D3035** Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter
- D3892** Practice for Packaging/Packing of Plastics
- D4218** Test Method for Determination of Carbon Black Content in Polyethylene Compounds By the Muffle-Furnace Technique
- D4703** Practice for Compression Molding Thermoplastic Materials into Test Specimens, Plaques, or Sheets
- D4883** Test Method for Density of Polyethylene by the Ultrasound Technique
- D4976** Specification for Polyethylene Plastics Molding and Extrusion Materials
- D5033** Guide for Development of ASTM Standards Relating to Recycling and Use of Recycled Plastics (Withdrawn 2007)³
- F1473** Test Method for Notch Tensile Test to Measure the Resistance to Slow Crack Growth of Polyethylene Pipes and Resins
- F2263** Test Method for Evaluating the Oxidative Resistance

³ The last approved version of this historical standard is referenced on www.astm.org.

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