Designation: D7472 – 09 (Reapproved 2014)

Standard Specification for EFEP-Fluoropolymer Molding and Extrusion Materials[1]

This standard is issued under the fixed designation D7472; 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 melt processible molding and extrusion materials of EFEP-fluoropolymer. The EFEP resin is a copolymer of ethylene, tetrafluoroethylene, and hexafluoropropylene.

1.2 This specification does not cover blended materials and does not cover recycled materials.

1.3 The values stated in SI units as detailed in IEEE/ASTM SI-10 are to be regarded as the standard. The values given in parentheses are for information only.

1.4 The following safety hazards caveat pertains only to the test method portion, Section 11, of this specification. *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 1—Although this specification and ISO 12086-1 and ISO 12086-2 differ in approach or detail, data obtained using either are technically equivalent.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D150 Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation

D618 Practice for Conditioning Plastics for Testing

D638 Test Method for Tensile Properties of Plastics

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

D1600 Terminology for Abbreviated Terms Relating to Plastics

D3418 Test Method for Transition Temperatures and Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry

D3892 Practice for Packaging/Packing of Plastics

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

IEEE/ASTM SI-10 Use of the International System of Units (SI): The Modem Metric System

2.2 *ISO Standards:*[3]

ISO 12086-1 Plastics—Fluoropolymer Dispersions and Moulding and Extrusion Materials—Part 1

ISO 12086-2 Plastics—Fluoropolymer Dispersions and Moulding and Extrusion Materials—Part 2

3. Terminology

3.1 *General*—The terminology given in Terminology D883 is applicable to this specification.

3.2 *Definitions:*

3.3 *lot, n*—one production run or a uniform blend of two or more production runs.

3.4 *General*—The abbreviated terms given in Terminology D1600 are applicable to this specification.

4. Classification

4.1 This specification covers two types of fluoropolymer supplied in pellet form classified according to their melting points. The resins of each type are divided into one to two grades in accordance with their melt flow rate.

4.2 An one-line system shall be used to specify materials covered by this specification. The system uses predefined cells to refer to specific aspects of this specification, as illustrated as follows:

Specification _____
Standard Number : Type : Grade : Special
Block : : : Notes
: : : :

Example: Specification D7472 - 09, I2

For this example, the line callout shall be, Specification D7472 – 09, I2 and shall specify a fluoropolymer that has all of the properties listed for that type and grade in the appropriate

[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.

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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.

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