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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 37199.2-2018

Plastics -- Polybutene (PB) moulding and extrusion materials -- Part 2: Preparation of test specimens and determination of properties

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Foreword

GB/T 37199 "Plastic Polybutene (PB) Molding and Extrusion Materials" is divided into the following two parts.

--- Part 1. The naming system and classification basis;

--- Part 2. Sample preparation and performance determination.

This part is the second part of GB/T 37199.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the redrafting method to modify the use of ISO 8986-2.2009 "plastic polybutene-1 (PB-1) molding and extrusion materials second

Part. Sample preparation and performance determination.

Compared with ISO 8986-2.2009, this part adds Appendix A to the standard structure, and gives the normative references in this part.

A comparison list of ISO 8986-2.2009 normative references.

The main technical differences between this part and ISO 8986-2.2009 and their reasons are as follows.

--- Regarding the normative reference documents, this part has made technical adjustments, using equivalent or modified China that adopts international standards.

National standards replace the corresponding international standards. To adapt to the technical conditions of our country. The adjustments are concentrated in Chapter 2

In the normative reference document, see Appendix A for specific adjustments;

--- specifies the condition adjustment conditions of the sample. temperature 23 ° C +/- 2 ° C, relative humidity 50% +/- 10% (see Chapter 4), so that the standard gauge

Be more clear;

--- The test conditions for the melt flow rate are specified. test condition D (190 ° C/2.16 kg), test condition T (190 ° C/5.0 kg),

Test conditions F (190 ° C/10.0 kg) (see Table 2) to make the standard provisions more clear;

--- Modify the tensile specimen type and size ISO 527-4 (type 1B specimen) to GB/T 1040.2-2006 (sample 1B) (see

Table 2);

---Repair the relative permittivity, dielectric loss factor, volume resistivity, surface resistivity of the sample type and size ">=80x>=80x1"

Change to ">=60x>=60x2" (see Table 2) to meet the requirements of GB/T 19467.1-2004;

--- Modify the electrical strength sample type and size ">=80x>=80x1" to ">=60x>=60x1", ">=80x>=80x3"

It is ">=60x>=60x2" (see Table 2) to meet the requirements of GB/T 19467.1-2004;

--- Compared with the electric trace index sample type and size ">=15 x >= 15 x 4" was changed to ">= 20 x >= 20 x 4" (see Table 2) to match

GB/T 4207-2012 requirements;

--- Modify the type and size of the water-absorbent sample "50 x 50 x 3 or phi 50 x 3" to "60 x 60 x 1" (see Table 2) to match

GB/T 1034-2008 requirements;

--- Specified condition adjustment of the density (see Table 3) to make the standard regulations more clear.

This section has made the following editorial changes.

--- Modified the standard name.

This part was proposed by the China Petroleum and Chemical Industry Federation.

This part is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15).

This section is responsible for drafting. Resin Application Research Institute of Beijing Yanshan Branch of China Petroleum & Chemical Corporation.

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1 Scope

This part of GB/T 37199 specifies the methods and conditions for the preparation and performance determination of polybutene-1 (PB-1) molded and extruded materials.

For the sake of simplicity, it is referred to as polybutene (PB) in this section. This section also specifies the pretreatment of the test material and the sample before the test.

State adjustment requirements.

This section lists the appropriate and necessary properties and test methods for characterizing polybutene (PB) molding and extrusion materials. These properties are from

GB/T 19467.1-2004 selected in the general test method. This section also lists molding or extrusion materials that are widely used or have special

Other test methods of meaning, and methods for determining the naming properties in Part 1.

In order to ensure the reproducibility and repeatability of the test results, the method of sample preparation and state adjustment specified in this section can be used.

The sample size and test method. Test data obtained using specimens prepared under different conditions or using specimens of different sizes may not

Consistent.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Plastics -- Determination of density of non-foam plastics -- Part 1 . Dipping method, liquid pycnometer method and titration method

(ISO 1183-1.2004, IDT)

Plastics -- Determination of density of non-foam plastics - Part 2. Density gradient column method (ISO 1183-2.

2004, MOD)

Plastics -- Determination of density of non-foam plastics -- Part 3 . Gas pycnometer method (ISO 1183-3.

1999, IDT)

GB/T 1034-2008 Determination of water absorption of plastics (ISO 62.2008, IDT)

Plastics -- Determination of tensile properties of plastics - Part 2. Test conditions for molded

and extruded plastics (ISO 527-

2.1993, IDT)

Plastics -- Determination of impact properties of simply supported beams - Part 1 . Non-instrumental impact test (ISO 179-1.

2000, IDT)

GB/T 1043.2-2018 Determination of impact properties of simply supported beams - Part 2. Instrumental impact test (ISO 179-2.

1997)

GB/T 1408.1-2016 Test methods for electrical strength of insulating materials - Part 1. Tests under power frequency (IEC 60243-1.2013,

IDT)

GB/T 1409-2006 Measuring the electrical permittivity and dielectric of electrical insulating materials at power frequency, audio, high frequency (including the wavelength of the meter wave)

Recommended method for loss factor (IEC 60250. 1969, MOD)

GB/T 1410-2006 Test method for volume resistivity and surface resistivity of solid insulating materials (IEC 60093. 1980, IDT)

GB/T 1632.3-2010 Determination of viscosity of polymer dilute solutions using capillary viscometer - Part 3. Polyethylene and poly

Propylene (ISO 1628-3.2001, MOD)

Plastics - Determination of deformation temperature of plastics - Part 2. Plastics, hard rubber and long fibre reinforced composites