



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39827.2-2021

**Plastics - Post-consumer poly(ethylene terephthalate)(PET)
bottle recyclates - Part 2: Preparation of test specimens and
determination properties**

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Foreword

GB/T 39827 "Plastic Used Polyethylene Terephthalate (PET) Bottle Recycling" is divided into 2 parts.

---Part 1.Naming system and classification basis;

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

This part is Part 2 of GB/T 39827.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the ISO 12418-2.2012 "Recycled Plastic Used Polyethylene Terephthalate (PET) Bottles"

Collection Part 2.Sample preparation and performance measurement.

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB/T 1632.1-2008 Plastics use capillary viscometer to determine the viscosity of polymer dilute solutions Part 1.General rules

(ISO 1628-1.1998, IDT);

---GB/T 1632.5-2008 Plastics use capillary viscometer to determine the viscosity of polymers in dilute solutions. Part 5.Thermoplasticity

Homopolymer and copolymer polyester (TP) (ISO 1628-5.1998, MOD);

---GB/T 2035-2008 Plastic terms and definitions (ISO 472.1999, IDT);

---GB/T 30102-2013 Guidelines for the Recovery and Recycling of Plastic Plastic Waste (ISO 15270.2008, IDT).

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).

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1 Scope

This part of GB/T 39827 specifies the test method for the performance of recycled polyethylene terephthalate (PET) bottles.

2 Normative references

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

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

ISO 472 Plastics Vocabulary (Plastics-Vocabulary)

ISO 1628-1 Plastics use capillary viscometer to determine the viscosity of polymer dilute solutions. Part 1.General (Plastics-Deter-

minationoftheviscosityofpolymersindilutesolutionusingcapillaryviscometers-Part 1.General principles)

ISO 1628-5.1998 Plastics. Determination of the viscosity of polymers in dilute solutions using capillary viscometers. Part 5.Thermoplastic homopolymers and copolymers

Polyester (TP)[Plastics-Determinationoftheviscosityofpolymersindilutesolutionusingcapillary viscometers-Part 5.Thermoplasticpolyester(TP)homopolymersandcopolymers]

ISO 15270 Guidelines for the Recovery and Recycling of Plastic Plastic Waste (Plastics-Guidelinesfortherecoveryand

recyclingofplasticswaste)

ISO 15512.2008 Plastics-Determination of water content (Plastics-Determination of water

content)

EN15348.2007 Characterization of Recycled Plastics Recycling Plastic Polyethylene Terephthalate (PET) [Plastics-Recycledplastics-Characterizationofpoly(ethyleneterephthalate)(PET)recyclates]

3 Terms and definitions

The terms and definitions defined by ISO 472 and ISO 15270 are applicable to this document.

4.1 Feature classification

The characteristics of PET recycling are divided into the following two categories, listed in Table 1.

---Characteristics required for all recyclables (namely mandatory characteristics);

---Features required by customers (optional).

4.2 Test method

The performance should be measured according to the methods listed in Table 1. If requested by the user, the supplier shall provide the test results, sampling

Test report of method and number of repetitions.