
Plastics — Post-consumer poly(ethylene terephthalate) (PET) bottle recyclates —

Part 2:

**Preparation of test specimens and
determination of properties**

*Plastiques — Recyclats de bouteilles en poly(téréphtalate d'éthylène)
(PET) post-consommation —*

Partie 2: Préparation des éprouvettes et détermination des propriétés



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12418-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

ISO 12418 consists of the following parts, under the general title *Plastics — Post-consumer poly(ethylene terephthalate) (PET) bottle recyclates*:

- *Part 1: Designation system and basis for specifications*
- *Part 2: Preparation of test specimens and determination of properties*

Plastics — Post-consumer poly(ethylene terephthalate) (PET) bottle recyclates —

Part 2:

Preparation of test specimens and determination of properties

1 Scope

This part of ISO 12418 specifies the test methods to be used in determining the properties of post-consumer poly(ethylene terephthalate) (PET) bottle recyclates.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 472, *Plastics — Vocabulary*

ISO 1628-1, *Plastics — Determination of the viscosity of polymers in dilute solution using capillary viscometers — Part 1: General principles*

ISO 1628-5, *Plastics — Determination of the viscosity of polymers in dilute solution using capillary viscometers — Part 5: Thermoplastic polyester (TP) homopolymers and copolymers*

ISO 15270, *Plastics — Guidelines for the recovery and recycling of plastics waste*

ISO 15512:2008, *Plastics — Determination of water content*

EN 15348:2007, *Plastics — Recycled plastics — Characterization of poly(ethylene terephthalate) (PET) recyclates*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 472 and ISO 15270 apply.

4 Characterization of PET recyclates

4.1 Classification of characteristics

The characteristics of PET recyclates are classified into two types, given in Table 1, as follows:

- those which are required for all recyclates (i.e. mandatory characteristics);
- customer specifications (these are optional).

4.2 Test methods

The characteristics shall be determined using the test methods given in Table 1. A certificate of analysis, including the test results for each batch of recyclate, the sampling method and the number of replicates, shall be provided by the supplier to the purchaser on request.

NOTE The sampling method and the number of replicates are important in determining the quality of the material. Quality levels can vary within the batch and from batch to batch, depending on the source of the recyclate.