
**Plastics — Polytetrafluoroethylene
(PTFE) semi-finished products —**

**Part 1:
Requirements and designation**

*Plastiques — Semi-produits en polytétrafluoroéthylène (PTFE) —
Partie 1: Spécifications et désignation*



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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 13000-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 13000-1:1997), which has been technically revised.

ISO 13000 consists of the following parts, under the general title *Plastics — Polytetrafluoroethylene (PTFE) semi-finished products*:

- *Part 1: Requirements and designation*
- *Part 2: Preparation of test specimens and determination of properties*

In this corrected version of ISO 13000-1:2005, the tolerance on the inner diameter corresponding to code-letter "a" in the first table in 4.2.6 has been changed from $-\frac{0}{6}$ mm to $-\frac{0}{0,6}$ mm.

Plastics — Polytetrafluoroethylene (PTFE) semi-finished products —

Part 1: Requirements and designation

1 Scope

This part of ISO 13000 specifies the requirements for processed unfilled polytetrafluoroethylene (PTFE) products, which may occur in several forms. The PTFE used to make the semi-finished product is described in ISO 12086-1 and, as provided in ISO 12086-1, may contain up to 1 % of a comonomer. The PTFE used to make the semi-finished product may be virgin, reprocessed or recycled resin. The addition of up to 1,5 % by mass of pigment or colorant is permitted. This part of ISO 13000 allows for four grades based on tensile strength and elongation at break. The semi-finished products can be as-processed (type P) or dimensionally stabilized (type S) and may also have specified electrical properties or other properties when they are required for an application.

NOTE References to other standard specifications for semi-finished products made from polytetrafluoroethylene are listed in Annex A for information.

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 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

ISO 12086-1, *Plastics — Fluoropolymer dispersions and moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ISO 13000-2, *Plastics — Polytetrafluoroethylene (PTFE) semi-finished products — Part 2: Preparation of test specimens and determination of properties*

3 Terminology

3.1 Terms and definitions

For the purposes of this part of ISO 13000, the terms and definitions given in ISO 472 and ISO 12086-1 and the following terms and definitions apply.