

SLOVENSKI STANDARD
oSIST prEN ISO 1183-1:2010
01-junij-2010

Polimerni materiali - Metode za določanje gostote nepenjenih polimernih materialov - 1. del: Metoda s potapljanjem, metoda s tekočinskim piknometrom in titracijska metoda (ISO/DIS 1183-1:2010)

Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method (ISO/DIS 1183-1:2010)

Plastiques - Méthodes de détermination de la masse volumique des plastiques non alvéolaires - Partie 1: Méthode par immersion, méthode du pycnomètre en milieu liquide et méthode par titrage (ISO/DIS 1183-1:2010)

Ta slovenski standard je istoveten z: prEN ISO 1183-1

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
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oSIST prEN ISO 1183-1:2010

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN ISO 1183-1

April 2010

ICS 83.080.01

Will supersede EN ISO 1183-1:2004

English Version

**Plastics - Methods for determining the density of non-cellular
plastics - Part 1: Immersion method, liquid pycnometer method
and titration method (ISO/DIS 1183-1:2010)**

Plastiques - Méthodes de détermination de la masse
volumique des plastiques non alvéolaires - Partie 1:
Méthode par immersion, méthode du pycnomètre en milieu
liquide et méthode par titrage (ISO/DIS 1183-1:2010)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 249.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (prEN ISO 1183-1:2010) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 1183-1:2004.

Endorsement notice

The text of ISO/DIS 1183-1:2010 has been approved by CEN as a prEN ISO 1183-1:2010 without any modification.

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DRAFT INTERNATIONAL STANDARD ISO/DIS 1183-1

ISO/TC 61/SC 5

Secretariat: ANSI

Voting begins on:
2010-04-08Voting terminates on:
2010-09-08

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Plastics — Methods for determining the density of non-cellular plastics —

Part 1: Immersion method, liquid pycnometer method and titration method

Plastiques — Méthodes de détermination de la masse volumique des plastiques non alvéolaires —

Partie 1: Méthode par immersion, méthode du pycnomètre en milieu liquide et méthode par titrage

[Revision of first edition (ISO 1183-1:2004)]

ICS 83.080.01

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ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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ISO/DIS 1183-1

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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 1183-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*.

This second/third/... edition cancels and replaces the first/second/... edition (), [clause(s) / subclause(s) / table(s) / figure(s) / annex(es)] of which [has / have] been technically revised.

ISO 1183 consists of the following parts, under the general title *Plastics — Methods for determining the density of non-cellular plastics*:

- *Part 1: Immersion method, liquid pycnometer method and titration method*
- *Part 2: Density gradient column method*
- *Part 3: Gas pycnometer method*

Plastics — Methods for determining the density of non-cellular plastics —

Part 1:

Immersion method, liquid pycnometer method and titration method

WARNING — The use of this part of ISO 1183 may involve hazardous materials, operations or equipment. This part of ISO 1183 does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this part of ISO 1183 to establish appropriate health and safety practices and to determine the applicability of any regulatory limitations prior to use.

1 Scope

This part of ISO 1183 specifies three methods for the determination of the density of non-cellular plastics in the form of void-free moulded or extruded objects, as well as powders, flakes and granules.

- Method A: Immersion method, for solid plastics (except for powders) in void-free form.
- Method B: Liquid pycnometer method, for particles, powders, flakes, granules or small pieces of finished parts.
- Method C: Titration method, for plastics in any void-free form.

NOTE This part of ISO 1183 is applicable to pellets as long as they are void-free. Density is frequently used to follow variations in physical structure or composition of plastic materials. Density may also be useful in assessing the uniformity of samples or specimens. Often the density of plastic materials will depend upon the choice of specimen preparation method. When this is the case, precise details of the specimen preparation method will have to be included in the appropriate material specification. This note is applicable to all three methods.

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 31-3, *Quantities and units — Part 3: Mechanics*

ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing*

ISO 472:1999, *Plastics — Vocabulary*

3 Terms and definitions

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