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

Part 1: Immersion method, liquid pyknometer 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

Reference number
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Contents

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 edition cancels and replaces the first edition (ISO 1183-1:2004), which has been technically revised.

The main changes compared to the previous edition are as follows:

a) the equation used to calculate the dependence of the density of air on pressure and temperature in Clause 6 has been replaced by two equations, one for non-tropical conditions, the other for tropical conditions;

b) a new annex (Annex B) has been added showing how the basic air buoyancy correction equation [Equation (5)] is derived.

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 pyknometer method and titration method*

— *Part 2: Density gradient column method*

— *Part 3: Gas pyknometer method*