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Plastics — Determination of bulk factor of moulding materials

Plastiques — Détermination du facteur de contraction des matières à mouler

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document 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 171:1980), which has been technically revised.

The main changes are as follows:

— the normative references have been updated;

— the definition of the bulk factor has been revised;

— the principle of the method has been added;

— the document has been editorially revised.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Plastics — Determination of bulk factor of moulding materials

1 Scope

This document specifies a method of determining the bulk factor of a moulding material based on the ratio of the apparent volumetric density of a given quantity of particles and the corresponding material density.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60:—[1)], *Plastics — Determination of apparent density of material that can be poured from a specified funnel*

ISO 61:—[2)], *Plastics — Determination of apparent density of moulding material that cannot be poured from a specified funnel*

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

ISO 1183 (all parts), *Plastics — Methods for determining the density of non-cellular plastics*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
bulk factor
ratio of the apparent volumetric density of a given quantity of particles and the corresponding material density

4 Principle

Knowledge of the bulk factor of a moulding material enables the calculation of minimum cavity volume in the design of moulds.

The bulk factor is calculated from the independently determined apparent volumetric density of the material particles and density of the material.

1) Under revision. Stage at the date of publication: ISO/DIS 60:2022.

2) Under revision. Stage at the date of publication: ISO/DIS 61:2022.

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