Irish Standard
I.S. EN ISO 3167:2014

Plastics - Multipurpose test specimens (ISO 3167:2014)

I.S. EN ISO 3167:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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It has been brought to our attention that this document, issued on 2014-08-06, requires modification.

The superseding information was missing from the text and title pages.

Please find enclosed the updated English version.

We apologise for any inconvenience this may cause.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 3167

August 2014

ICS 83.080.01

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English Version

Plastics - Multipurpose test specimens (ISO 3167:2014)

Plastiques - Éprouvettes à usages multiples (ISO 3167:2014)

Kunststoffe - Vielzweckprobekörper (ISO 3167:2014)

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Foreword

This document (EN ISO 3167:2014) 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 European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2015, and conflicting national standards shall be withdrawn at the latest by February 2015.

This document supersedes EN ISO 3167:2003.

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

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Endorsement notice

The text of ISO 3167:2014 has been approved by CEN as EN ISO 3167:2014 without any modification.

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INTERNATIONAL STANDARD

ISO 3167

Fifth edition
2014-08-01

Plastics — Multipurpose test specimens

Plastiques — Éprouvettes à usages multiples

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 2, *mechanical properties*.

This fifth edition results from the reinstatement of the previous edition (ISO 3167:2002) which was withdrawn in 2013.

ISO 3167 is intended to be gradually replaced by ISO 20753 which specifies the designations and dimensions of test specimens used for the acquisition of comparable data, and also other frequently used specimens, in one document for ease of reference.

Plastics — Multipurpose test specimens

1 Scope

This International Standard specifies requirements relating to multipurpose test specimens for plastic moulding materials intended for processing by injection or direct compression moulding.

Specimens of types A and B are tensile test specimens from which, with simple machining, specimens for a variety of other tests can be taken (see Annex A). Because they have such wide utility, these tensile specimens are referred to in this International Standard as multipurpose test specimens.

The principal advantage of a multipurpose test specimen is that it allows all the test methods mentioned in Annex A to be carried out on the basis of comparable mouldings. Consequently, the properties measured are coherent as all are measured with specimens in the same state. In other words, it can be expected that test results for a given set of specimens will not vary appreciably due to unintentionally different moulding conditions. On the other hand, if desired, the influence of moulding conditions and/or different states of the specimens can be assessed without difficulty for all of the properties measured.

For quality-control purposes, the multipurpose test specimen can serve as a convenient source of further specimens not readily available. Furthermore, the fact that only one mould is required may be advantageous.

The use of multipurpose test specimens is to be agreed upon by the interested parties, because there may be significant differences between properties of the multipurpose test specimens and those specified in the relevant test methods.

2 Normative references

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

ISO 293, *Plastics — Compression moulding of test specimens of thermoplastic materials*

ISO 294-1, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens*

ISO 295, *Plastics — Compression moulding of test specimens of thermosetting materials*

ISO 2818, *Plastics — Preparation of test specimens by machining*

ISO 10724-1, *Plastics — Injection moulding of test specimens of thermosetting powder moulding compounds (PMCs) — Part 1: General principles and moulding of multipurpose test specimens*

3 Dimensions of test specimens

For the purposes of this International Standard, the preferred multipurpose test specimen is the type A tensile specimen shown in Figure 1. This can be made suitable for a variety of other tests by simple cutting, because the length l_1 of its narrow parallel-sided portion is 80 mm ± 2 mm.