

## Plastics - Multipurpose test specimens (ISO 3167:2014)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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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of an identical text or by endorsement, at the latest by February 2015, and conflicting national standards shall be withdrawn at the latest by February 2015.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.

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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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# 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  $80 \text{ mm} \pm 2 \text{ mm}$ .