

Plastics - Polyoxymethylene (POM) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 9988-2:2006)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 9988-2:2015 sisaldab Euroopa standardi EN ISO 9988-2:2015 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 9988-2:2015 consists of the English text of the European standard EN ISO 9988-2:2015.
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Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

Plastics - Polyoxymethylene (POM) moulding and extrusion  
materials - Part 2: Preparation of test specimens and  
determination of properties (ISO 9988-2:2006)

Plastiques - Matériaux à base de polyoxyméthylène (POM)  
pour moulage et extrusion - Partie 2: Préparation des  
échantillons et détermination des propriétés (ISO 9988-  
2:2006)

Kunststoffe - Polyoxymethylen-(POM-)Formmassen - Teil 2:  
Herstellung von Probekörpern und Bestimmung von  
Eigenschaften (ISO 9988-2:2006)

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

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## Foreword

The text of ISO 9988-2:2006 has been prepared by Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 9988-2:2015 by 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of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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### Endorsement notice

The text of ISO 9988-2:2006 has been approved by CEN as EN ISO 9988-2:2015 without any modification.

# Plastics — Polyoxymethylene (POM) moulding and extrusion materials —

## Part 2: Preparation of test specimens and determination of properties

### 1 Scope

This part of ISO 9988 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of polyoxymethylene moulding and extrusion materials. Requirements for handling test material and for conditioning both the test material before moulding and the specimens before testing are given.

Procedures and conditions are described for the preparation of test specimens, and procedures are given for measuring properties of the materials from which these specimens are made. Properties and test methods which are suitable and necessary to characterize polyoxymethylene moulding and extrusion materials are listed.

The properties have been selected from the general test methods in ISO 10350-1:1998. Other test methods in wide use for, or of particular significance to, these moulding and extrusion materials are also included in this part of ISO 9988 as designatory properties specified in ISO 9988-1: melt flow rate and tensile modulus.

In order to obtain reproducible and comparable test results, it is necessary to use the methods of specimen preparation and conditioning. The specimen dimensions and the test procedures are specified herein. Values determined will not necessarily be identical to those obtained using specimens of different dimensions or prepared using different procedures.

### 2 Conformance

In Clause 3, the year of the publication of each normative reference has been specifically stated. In order to be able to claim conformity with this part of ISO 9988, it is essential that the user use only those editions given, and not earlier or more recent editions.

### 3 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 62:1999, *Plastics — Determination of water absorption*

ISO 75-2:2004, *Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite*

ISO 178:2001, *Plastics — Determination of flexural properties*

ISO 179-1:2000, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test*

ISO 180:2000, *Plastics — Determination of Izod impact strength*

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

ISO 294-1:1996, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens*

ISO 294-3:2002, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates*

ISO 294-4:2001, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 4: Determination of moulding shrinkage*

ISO 527-2:1993, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 899-1:2003, *Plastics — Determination of creep behaviour — Part 1: Tensile creep*

ISO 1133:2005, *Plastics — Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics*

ISO 1183-1:2004, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method*

ISO 3167:2002, *Plastics — Multipurpose test specimens*

ISO 10350-1:1998, *Plastics — Acquisition and presentation of comparable single-point data — Part 1: Moulding materials*

ISO 11357-3:1999/Amd1:2005, *Plastics — Differential scanning calorimetry (DSC) — Part 3: Determination of temperature and enthalpy of melting and crystallization — Amendment 1*

ISO 11359-2:1999, *Plastics — Thermomechanical analysis (TMA) — Part 2: Determination of coefficient of linear thermal expansion and glass transition temperature*

IEC 60093:1980, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

IEC 60112:2003, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60243-1:1998, *Electrical strength of insulating materials — Test methods — Part 1: Tests at power frequencies*

IEC 60250:1969, *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths*

IEC 60296:2003, *Fluids for electrotechnical applications — Unused mineral insulating oils for transformers and switchgear*

## **4 Preparation of test specimens**

### **4.1 General**

Specimens shall be prepared by injection moulding. It is essential that they are always prepared by the same procedure, using the same processing conditions. The standard conditions are given below.

The material shall be kept in moisture-proof containers until it is required for use.