

**Plastid. Fluoropolümeer-disperssed
süsteemid ning vormimis- ja
ekstrusioonimaterjalid. Osa 2:
Proovikehade ettevalmistamine ja
omaduste määramine**

Plastics - Fluoropolymer dispersions and moulding
and extrusion materials - Part 2: Preparation of test
specimens and determination of properties

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 12086-2:2006 sisaldab Euroopa standardi EN ISO 12086-2:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 30.03.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 12086-2:2006 consists of the English text of the European standard EN ISO 12086-2:2006.</p> <p>This document is endorsed on 30.03.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of ISO 12086 describes the preparation of test specimens and provides test methods to define characteristics of thermoplastic fluoropolymer resins. Results from the testing may be used as the basis for designation, material specifications or both.</p>	<p>Scope:</p> <p>This part of ISO 12086 describes the preparation of test specimens and provides test methods to define characteristics of thermoplastic fluoropolymer resins. Results from the testing may be used as the basis for designation, material specifications or both.</p>
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Võtmesõnad: determination, extrusion materials, moulding materials, plastics, polymer dispersions, polymers, properties, specimen preparation, tests

English Version

Plastics - Fluoropolymer dispersions and moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 12086-2:2006)

Plastiques - Polymères fluorés: dispersions et matériaux pour moulage et extrusion - Partie 2: Préparation des éprouvettes et détermination des propriétés (ISO 12086-2:2006)

Kunststoffe - Fluoropolymerdispersionen, Formmassen und Extrusionsmaterialien - Teil 2: Herstellung von Probekörpern und Bestimmung von Eigenschaften (ISO 12086-2:2006)

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Foreword

This document (EN ISO 12086-2:2006) 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 IBN.

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 August 2006, and conflicting national standards shall be withdrawn at the latest by August 2006.

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Endorsement notice

The text of ISO 12086-2:2006 has been approved by CEN as EN ISO 12086-2:2006 without any modifications.

**Plastics — Fluoropolymer dispersions
and moulding and extrusion materials —**

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

*Plastiques — Polymères fluorés: dispersions et matériaux pour
moulage et extrusion —*

Partie 2: Préparation des éprouvettes et détermination des propriétés



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Foreword

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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.

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ISO 12086-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 12086-2:1995), which has been technically revised.

ISO 12086 consists of the following parts, under the general title *Plastics — Fluoropolymer dispersions and moulding and extrusion materials*:

- *Part 1: Designation system and basis for specifications*
- *Part 2: Preparation of test specimens and determination of properties*

Plastics — Fluoropolymer dispersions and moulding and extrusion materials —

Part 2: Preparation of test specimens and determination of properties

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1 Scope

1.1 This part of ISO 12086 describes the preparation of test specimens and provides test methods to define characteristics of thermoplastic fluoropolymer resins. Results from the testing may be used as the basis for designation, material specifications or both. This part of ISO 12086 describes the conditions of test for determining both designatory and other properties of the homopolymers and various copolymers of fluoromonomers, as dispersions or powders for moulding, extrusion and other uses. The test procedures included are appropriate for, but are not restricted to, the fluoropolymers listed in Clause 4 and for which designatory properties are specified in ISO 12086-1.

1.2 The properties of semi-finished and finished products made from fluoropolymer resins depend on the material used, the shape of the product, the physical and morphological state of the material resulting from the processing operations, and on the test conditions. Therefore, to obtain reproducible test results, the defined methods of preparation of test specimens and defined test conditions given in this part of ISO 12086 must be applied.

1.3 Agreements between vendor and purchaser should preferably be based on properties measured using the specimens and test conditions described in this part of ISO 12086.

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

ISO 178, *Plastics — Determination of flexural properties*

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

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

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

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

ISO 472, *Plastics — Vocabulary*

ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles*

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

ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets*

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 976, *Rubber and plastics — Polymer dispersions and rubber latices — Determination of pH*

ISO 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

ISO 1043-2, *Plastics — Symbols and abbreviated terms — Part 2: Fillers and reinforcing materials*

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

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

ISO 1183-2, *Plastics — Methods for determining the density of non-cellular plastics — Part 2: Density gradient column method*

ISO 4589 (all parts), *Plastics — Determination of burning behaviour by oxygen index*

ISO 11357-2, *Plastics — Differential scanning calorimetry (DSC) — Part 2: Determination of glass transition temperature*

ISO 11357-3, *Plastics — Differential scanning calorimetry (DSC) — Determination of temperature and enthalpy of melting and crystallization*

ISO 12086-1, *Plastics — Fluoropolymer dispersions and moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ISO 13320-1, *Particle size analysis — Laser diffraction methods — General principles*

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

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

IEC 60250, *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*

ASTM D 746, *Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact*

ASTM D 1430, *Standard Classification System for Polychlorotrifluoroethylene (PCTFE) Plastics*

ASTM D 1894, *Standard Test Method for Static and Kinetic Coefficients of Friction of Plastic Film and Sheet*

ASTM D 3418, *Standard Test Method for Transition Temperatures of Polymers by Differential Scanning Calorimetry*

ASTM D 4052, *Standard Test method for Density and Relative Density of Liquids by Digital Density Meter*

ASTM D 4591, *Standard Test Method for Determining Temperatures and Heats of Transitions of Fluoropolymers by Differential Scanning Calorimetry*

ASTM D 4894, *Standard Specification for Polytetrafluoroethylene (PTFE) Granular Molding and Ram Extrusion Materials*

ASTM D 4895, *Standard Specification for Polytetrafluoroethylene (PTFE) Resin Produced from Dispersion*

BS 4641:1986, *Method for specifying electroplated coatings of chromium for engineering purposes*