Plastid. Polükarbonaadist (PC) vormimis- ja ekstrusioonimaterjalid. Osa 2: Proovikehade ettevalmistamine ja omaduste määramine

Plastics - Polycarbonate (PC) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 7391-2:2006 sisaldab Euroopa standardi EN ISO 7391-2:2006 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 7391-2:2006 consists of the English text of the European standard EN ISO 7391-2:2006.

Käesolev dokument on jõustatud 28.04.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 28.04.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of ISO 7391 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of polycarbonate 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 here.

Scope:

This part of ISO 7391 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of polycarbonate 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 here.

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EUROPEAN STANDARD

EN ISO 7391-2

NORME EUROPÉENNE **EUROPÄISCHE NORM**

March 2006

Supersedes EN ISO 7391-2:1999

English Version

Plastics - Polycarbonate (PC) moulding and extrusion materials -Part 2: Preparation of test specimens and determination of properties (ISO 7391-2:2006)

Plastiques - Polycarbonate (PC) pour moulage et extrusion - Partie 2: Préparation des éprouvettes et détermination des propriétés (ISO 7391-2:2006)

Kunststoffe - Polycarbonat (PC)-Formmassen - Teil 2: Herstellung von Probekörpern und Bestimmung von Eigenschaften (ISO 7391-2:2006)

This European Standard was approved by CEN on 9 February 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 7391-2:2006) has been prepared by Technical Committee ISO/TC 61 Relastics" 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 September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

This document supersedes EN ISO 7391-2:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

en appre The text of ISO 7391-2:2006 has been approved by CEN as EN ISO 7391-2:2006 without any modifications.

INTERNATIONAL **STANDARD**

ISO 7391-2

> Third edition 2006-03-01

Plastics — Polycarbonate (PC) moulding

Plastics — Polycarbonate (, and extrusion materials — Part 2:
Preparation of test specimens and determination of properties

Part 2:
Preparation of test specimens and determination of properties

Part 2:
Preparation of test specimens and determination of properties

- Poi, traparation. Plastiques — Polycarbonate (PC) pour moulage et extrusion — Partie 2: Préparation des éprouvettes et détermination des propriétés



Reference number ISO 7391-2:2006(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

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

ISO 7391-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This third edition cancels and replaces the second edition (ISO 7391-2:1996), which has been technically revised.

ISO 7391 consists of the following parts, under the general title *Plastics* — *Polycarbonate (PC) moulding and extrusion materials*:

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

Plastics — Polycarbonate (PC) moulding and extrusion materials —

Part 2:

Preparation of test specimens and determination of properties

1 Scope

This part of ISO 7391 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of polycarbonate 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 here.

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

The properties have been selected from the general test methods in ISO 10350-1. 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 7391, as are the designatory properties specified in Part 1.

In order to obtain reproducible and comparable test results, it is necessary to use the methods of preparation and conditioning, the specimen dimensions and the test procedures 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 publication of each normative reference has been specifically stated. In order to be able to claim conformity with this part of ISO 7391, it is essential that the user use only those editions given, and not earlier or more recent editions.

3 Normative references

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 291:2005, Plastics — Standard atmospheres for conditioning and testing

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ISO 293:2004, Plastics — Compression moulding of test specimens of thermoplastic materials

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 306:2004, Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

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 1133:1997, 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 pyknometer method and titration method

ISO 1628-4:1999, Plastics — Determination of the viscosity of polymers in dilute solution using capillary viscometers — Part 4: Polycarbonate (PC) moulding and extrusion materials

ISO 2818:1994, Plastics — Preparation of test specimens by machining

ISO 3167:2002, Plastics — Multipurpose test specimens

ISO 4589-2:1996, Plastics — Determination of burning behaviour by oxygen index — Part 2: Ambient-temperature test

ISO 7391-1, Plastics — Polycarbonate (PC) moulding and extrusion materials — Part 1: Designation system and basis for specifications

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

ISO 11357-2:1999, Plastics — Differential scanning colorimetry (DSC) — Part 2: Determination of glass transition temperature

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

IEC 60695-11-10:2003, Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods