

**Plastics - Ethylene/vinyl alcohol (EVOH)
copolymer moulding and extrusion
materials - Part 2: Preparation of test
specimens and determination of properties**

Plastics - Ethylene/vinyl alcohol (EVOH) copolymer
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 14663-2:2006 sisaldab Euroopa standardi EN ISO 14663-2:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.05.2006 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 14663-2:2006 consists of the English text of the European standard EN ISO 14663-2:2006.</p> <p>This document is endorsed on 29.05.2006 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: This part of ISO 14663 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of EVOH 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.</p>	<p>Scope: This part of ISO 14663 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of EVOH 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.</p>
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Võtmesõnad:

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English Version

Plastics - Ethylene/vinyl alcohol (EVOH) copolymer moulding
and extrusion materials - Part 2: Preparation of test specimens
and determination of properties (ISO 14663-2:1999)

Plastiques - Matériaux à base de copolymères
éthylène/alcool vinylique (EVOH) pour moulage et extrusion
- Partie 2: Préparation des éprouvettes et détermination
des propriétés (ISO 14663-2:1999)

Kunststoffe - Ethylen-Vinylalkohol (EVOH)-Copolymer-
Formmassen - Teil 2: Herstellung von Probekörpern und
Bestimmung von Eigenschaften (ISO 14663-2:1999)

This European Standard was approved by CEN on 16 March 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.

CEN members are the national standards bodies of 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.



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Foreword

The text of ISO 14663-2:1999 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 14663-2:2006 by 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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

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

The text of ISO 14663-2:1999 has been approved by CEN as EN ISO 14663-2:2006 without any modifications.

**Plastics — Ethylene/vinyl alcohol (EVOH)
copolymer moulding and extrusion
materials —**

Part 2:

Preparation of test specimens and determination
of properties

*Plastiques — Matériaux à base de copolymères éthylène/alcool vinylique
(EVOH) pour moulage et extrusion —*

Partie 2: Préparation des éprouvettes et détermination des propriétés



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.

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.

International Standard ISO 14663-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

ISO 14663 consists of the following parts, under the general title *Plastics — Ethylene/vinyl alcohol (EVOH) copolymer moulding and extrusion materials*:

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

Annexes A, B and C form an integral part of this part of ISO 14663.

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Plastics — Ethylene/vinyl alcohol (EVOH) copolymer moulding and extrusion materials —

Part 2:

Preparation of test specimens and determination of properties

1 Scope

This part of ISO 14663 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of EVOH 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 are described 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 EVOH moulding and extrusion materials are listed.

The properties have been selected from the general test methods in ISO 10350. 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 14663, as is the designatory property specified in part 1: melt mass-flow rate.

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 specified herein. Values determined will not necessarily be identical to those obtained using specimens of different dimensions or prepared using different procedures.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 14663. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 14663 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 75-1:1993, *Plastics — Determination of temperature of deflection under load — Part 1: General test method.*

ISO 75-2:1993, *Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite.*

ISO 178:1993, *Plastics — Determination of flexural properties.*

- ISO 179-1:—¹⁾, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test.*
- ISO 180:—²⁾, *Plastics — Determination of Izod impact strength.*
- ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing.*
- ISO 294-2:1996, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 2: Small tensile bars.*
- ISO 306:1994, *Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST).*
- ISO 527-1:1993, *Plastics — Determination of tensile properties — Part 1: General principles.*
- ISO 527-2:1993, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics.*
- ISO 899-1:1993, *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 1183:1987, *Plastics — Methods for determining the density and relative density of non-cellular plastics.*
- ISO 2039-2:1987, *Plastics — Determination of hardness — Part 2: Rockwell hardness.*
- ISO 2818:1994, *Plastics — Preparation of test specimens by machining.*
- ISO 3146:1985, *Plastics — Determination of melting behaviour (melting temperature or melting range) of semi-crystalline polymers.*
- ISO 3167:1993, *Plastics — Multipurpose test specimens.*
- ISO 3451-1:1997, *Plastics — Determination of ash — Part 1: General methods.*
- ISO 10350:1993, *Plastics — Acquisition and presentation of comparable single-point data.*
- ISO 14663-1:1999, *Plastics — Ethylene/vinyl alcohol (EVOH) copolymer moulding and extrusion materials — Part 1: Designation system and basis for specifications.*
- IEC 60093:1980, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials.*
- IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions.*
- IEC 60243-1:1998, *Electrical strength of solid 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 60296:1982, *Specification for unused mineral insulating oils for transformers and switchgear.*
- IEC 60695-11-10:1999, *Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods.*

¹⁾ To be published. (Revision of ISO 179:1993)

²⁾ To be published. (Revision of ISO 180:1993)