



**SLOVENSKI STANDARD**  
**SIST EN ISO 15106-1:2005**

01-maj-2005

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Plastics - Film and sheeting - Determination of water vapour transmission rate - Part 1:  
Humidity detection sensor method (ISO 15106-1:2003)

Kunststoffe - Folien und Flächengebilde - Bestimmung der Wasserdampfdurchlässigkeit  
- Teil 1: Verfahren mit Feuchtigkeitssensor (ISO 15106-1:2003)

Plastiques - Film et feuille - Détermination du coefficient de transmission de vapeur d'eau  
- Partie 1: Méthode utilisant un détecteur d'humidité (ISO 15106-1:2003)

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**Ta slovenski standard je istoveten z: EN ISO 15106-1:2005**

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**ICS:**

83.140.10      Filmi in folije      Films and sheets

**SIST EN ISO 15106-1:2005**      en,fr,de

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 15106-1**

February 2005

ICS 83.140.10

English version

**Plastics - Film and sheeting - Determination of water vapour  
transmission rate - Part 1: Humidity detection sensor method  
(ISO 15106-1:2003)**

Plastiques - Film et feuille - Détermination du coefficient de  
transmission de vapeur d'eau - Partie 1: Méthode utilisant  
un détecteur d'humidité (ISO 15106-1:2003)

Kunststoffe - Folien und Flächegebilde - Bestimmung der  
Wasserdampfdurchlässigkeit - Teil 1: Verfahren mit  
Feuchtigkeitssensor (ISO 15106-1:2003)

This European Standard was approved by CEN on 3 February 2005.

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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COMITÉ EUROPÉEN DE NORMALISATION  
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**EN ISO 15106-1:2005 (E)****Foreword**

The text of ISO 15106-1:2003 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 15106-1:2005 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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**Endorsement notice**

The text of ISO 15106-1:2003 has been approved by CEN as EN ISO 15106-1:2005 without any modifications.

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INTERNATIONAL  
STANDARD

ISO  
15106-1

First edition  
2003-01-15

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**Plastics — Film and sheeting —  
Determination of water vapour  
transmission rate —**

**Part 1:  
Humidity detection sensor method**

iTeh STANDARD PREVIEW

*Plastiques — Film et feuille — Détermination du coefficient de  
transmission de vapeur d'eau —*

*Partie 1: Méthode utilisant un détecteur d'humidité*

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Reference number  
ISO 15106-1:2003(E)

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Published in Switzerland

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## ISO 15106-1:2003(E)

## 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 15106-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

ISO 15106 consists of the following parts, under the general title *Plastics — Film and sheeting — Determination of water vapour transmission rate*:

- *Part 1: Humidity detection sensor method*
- *Part 2: Infrared detection sensor method* [SIST EN ISO 15106-1:2005](https://standards.iteh.ai/catalog/standards/sist/1806ad78-152c-4552-95f5-4f76490562a/sist-en-iso-15106-1-2005)
- *Part 3: Electrolytic detection sensor method*



# Plastics — Film and sheeting — Determination of water vapour transmission rate —

## Part 1: Humidity detection sensor method

### 1 Scope

This part of ISO 15106 specifies an instrumental method for determining the water vapour transmission rate of plastic film, plastic sheeting and multi-layer structures including plastics, using a humidity detection sensor.

NOTE The method provides rapid measurement over a wide range of water vapour transmission rates.

### 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 2528:1995, *Sheet materials — Determination of water vapour transmission rate — Gravimetric (dish) method*

ISO 4593:1993, *Plastics — Film and sheeting — Determination of thickness by mechanical scanning*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **water vapour transmission rate**

the amount of water vapour transmitted through unit area of test specimen per unit time under specified conditions

NOTE Water vapour transmission rate is expressed in grams per square metre 24 hours [g/(m<sup>2</sup>·24 h)].

#### 3.2

##### **reference test specimen**

a test specimen whose water vapour transmission rate is known, or one for which the water vapour transmission rate has been determined in accordance with ISO 2528