

## SLOVENSKI STANDARD SIST EN ISO 15512:2004

01-februar-2004

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Plastics - Determination of water content (ISO 15512:1999)

Kunststoffe - Bestimmung des Wassergehaltes - (ISO 15512:1999)

iTeh STANDARD PREVIEW Plastiques - Dosage de l'eau (ISO 15512:1999) (standards.iteh.ai)

Ta slovenski standard je istovetenizi EN ISEN SISO (15512:2003 https://standards.iteh.ai/catalog/standards/sist/e190e968-1fa0-48da-b4ef-

87/Standards.itch.arcatalog/standards/StSt/C170C700-11a0-40da-04C1

### <u>ICS:</u>

83.080.01 Polimerni materiali na splošno

Plastics in general

SIST EN ISO 15512:2004

en

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN ISO 15512

November 2003

ICS 83.080.01

Supersedes EN ISO 960:1997

English version

### Plastics - Determination of water content (ISO 15512:1999)

Plastiques - Dosage de l'eau (ISO 15512:1999)

Kunststoffe - Bestimmung des Wassergehaltes - (ISO 15512:1999)

This European Standard was approved by CEN on 3 November 2003.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

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Ref. No. EN ISO 15512:2003 E

### Foreword

The text of ISO 15512:1999 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 15512:2003 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 May 2004, and conflicting national standards shall be withdrawn at the latest by May 2004.

This document supersedes EN ISO 960:1997.

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

## iTeh STANDARD PREVIEW (standards iteh ai)

The text of ISO 15512:1999 has be<u>en approved by CEN as</u> EN ISO 15512:2003 without any modifications. https://standards.iteh.ai/catalog/standards/sist/e190e968-1fa0-48da-b4eff896372f8e0c/sist-en-iso-15512-2004

NOTE Normative references to International Standards are listed in Annex ZA (normative).



EN ISO 15512:2003 (E)

# Annex ZA (normative)

### Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

Publication	Year	<u>Title</u>	EN	<u>Year</u>
ISO 62	1999 iTeh	Plastics - Determination of water absorption STANDARD PREVI (standards.iteh.ai)	EN ISO 62	1999
		SIST EN ISO 15512:2004		

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# INTERNATIONAL STANDARD

ISO 15512

First edition 1999-07-01

### **Plastics** — Determination of water content

Plastiques — Dosage de l'eau

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#### ISO 15512:1999(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 3.

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 15512 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*.

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### **Plastics** — Determination of water content

#### 1 Scope

**1.1** This International Standard specifies methods for the determination of the water content of plastics in the form of granules and finished articles. These methods do not test for water absorption (kinetics and equilibrium) of plastics as measured by ISO 62. The methods are suitable for the determination of water content as low as the following levels:

- Method A 0,1 % or better;
- Method B 0,01 % or better;
- Method C 0,01 % or better.

Water content is an important parameter for processing materials, and should remain below the level specified in the appropriate material standard.

- **1.2** Three alternative methods are specified in this International Standard.
  - (standards.iteh.ai)
- a) **Method A** is an extraction method using anhydrous methanol followed by a Karl-Fischer titration of the extracted water. It can be used for all <u>plastics</u> and <u>is 2 applicable</u> to granules having a maximum size of 4 mm × 4 mm × 3 mm <u>https://standards.iteh.ai/catalog/standards/sist/e190e968-1fa0-48da-b4ef-</u>
- b) Method B is a vaporization method using heated, dry air or nitrogen gas to evaporate the water, followed by a Karl-Fischer titration of the collected water. It can be used for all plastics and is applicable to granules smaller than 4 mm × 4 mm × 3 mm.
- c) Method C is a manometric method. The water content is determined from the increase in pressure which results when the water is evaporated under a vacuum. This method is not applicable to plastic samples containing volatile compounds, other than water, in amounts contributing significantly to the vapour pressure at room temperature. Checks for the presence of large amounts of volatile compounds should be carried out periodically, for example by gas chromatography. Such checks are particularly required for new types or grades of material.

#### **2** Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 62, Plastics — Determination of water absorption.

ISO 760:1978, Determination of water — Karl Fischer method (General method).