



# SLOVENSKI STANDARD SIST EN ISO 1798:2009

01-februar-2009

BUXca Yý U  
SIST EN ISO 1798:2000

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## Penjeni polimerni materiali - Ugotavljanje natezne trdnosti in raztezka pri pretrgu (ISO 1798:2008)

Flexible cellular polymeric materials - Determination of tensile strength and elongation at break (ISO 1798:2008)

Weich-elastische polymere Schaumstoffe - Bestimmung der Zugfestigkeit und der Bruchdehnung (ISO 1798:2008)

Matériaux polymères alvéolaires souples - Détermination de la résistance à la traction et de l'allongement à la rupture (ISO 1798:2008)

Ta slovenski standard je istoveten z: EN ISO 1798:2008

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### ICS:

83.100 Penjeni polimeri Cellular materials

SIST EN ISO 1798:2009 en,fr,de

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 1798**

February 2008

ICS 83.100

Supersedes EN ISO 1798:1999

English Version

## Flexible cellular polymeric materials - Determination of tensile strength and elongation at break (ISO 1798:2008)

Matériaux polymères alvéolaires souples - Détermination de la résistance à la traction et de l'allongement à la rupture (ISO 1798:2008)

Weich-elastische polymere Schaumstoffe - Bestimmung der Zugfestigkeit und der Bruchdehnung (ISO 1798:2008)

This European Standard was approved by CEN on 12 January 2008.

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

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**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
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[SIST EN ISO 1798:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/12eb24b9-b923-45bf-9a9e-507033a7c091/sist-en-iso-1798-2009>

## Foreword

This document (EN ISO 1798:2008) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

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

This document supersedes EN ISO 1798:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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 the United Kingdom.

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# INTERNATIONAL STANDARD

**ISO  
1798**

Fourth edition  
2008-02-01

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## **Flexible cellular polymeric materials — Determination of tensile strength and elongation at break**

*Matériaux polymères alvéolaires souples — Détermination de la  
résistance à la traction et de l'allongement à la rupture*

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## ISO 1798:2008(E)

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**Contents**

Page

Foreword.....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Apparatus .....</b>	<b>2</b>
<b>5 Test pieces .....</b>	<b>2</b>
<b>6 Procedure .....</b>	<b>4</b>
<b>7 Calculation.....</b>	<b>4</b>
<b>8 Test report .....</b>	<b>5</b>
<b>Annex A (informative) Comparative testing of type 1 and type 1A test pieces .....</b>	<b>6</b>
<b>Bibliography .....</b>	<b>11</b>

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[SIST EN ISO 1798:2009](https://standards.iteh.ai/catalog/standards/sist/12eb24b9-b923-45bf-9a9e-507033a7c091/sist-en-iso-1798-2009)

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**ISO 1798:2008(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 1798 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This fourth edition cancels and replaces the third edition (ISO 1798:1997), which has been technically revised. It also incorporates the Technical Corrigendum ISO 1798:1997/Cor.1:2003. The main change is the introduction of a second type of test piece (see Figure 1) and a comparison of the results obtained with the two test pieces (see Annex A).

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# Flexible cellular polymeric materials — Determination of tensile strength and elongation at break

**WARNING** — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

## 1 Scope

This International Standard specifies a method for determining the strength and deformation properties of flexible cellular materials when a test piece is extended at a constant rate until it breaks.

## 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 1923, *Cellular plastics and rubbers — Determination of linear dimensions*

ISO 7500-1:2004, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 9513, *Metallic materials — Calibration of extensometers used in uniaxial testing*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

## 3 Terms and definitions

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

### 3.1

#### tensile strength

##### TS

maximum tensile stress applied when stretching a test piece to rupture

### 3.2

#### elongation at break

##### $E_b$

percentage elongation of a test piece at rupture