



SLOVENSKI STANDARD
SIST EN ISO 899-1:2003

01-december-2003

BUXca Yý U
SIST EN ISO 899-1:2000

Polimerni materiali - Ugotavljanje lezenja - 1. del: Lezenje pri natezni obremenitvi
(ISO 899-1:2003)

Plastics - Determination of creep behaviour - Part 1: Tensile creep (ISO 899-1:2003)

Kunststoffe - Bestimmung des Kriechverhaltens - Teil 1: Zeitstand-Zugversuch (ISO 899-1:2003)

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Plastiques - Détermination du comportement au fluage - Partie 1: Fluage en traction (ISO 899-1:2003)

[SIST EN ISO 899-1:2003](https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

Ta slovenski standard je istoveten z: EN ISO 899-1:2003

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
-----------	--------------------------------	---------------------

SIST EN ISO 899-1:2003

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 899-1:2003

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 899-1

June 2003

ICS 83.080.01

Supersedes EN ISO 899-1:1996

English version

Plastics - Determination of creep behaviour - Part 1: Tensile creep (ISO 899-1:2003)

Plastiques - Détermination du comportement au fluage -
Partie 1: Fluage en traction (ISO 899-1:2003)

Kunststoffe - Bestimmung des Kriechverhaltens - Teil 1:
Zeitstand-Zugversuch (ISO 899-1:2003)

This European Standard was approved by CEN on 23 May 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>



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

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

EN ISO 899-1:2003 (E)

CORRECTED 2003-07-16

Foreword

This document (EN ISO 899-1:2003) has been prepared by Technical Committee ISO/TC 61 "Plastics" 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 December 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

This document supersedes EN ISO 899-1:1996.

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.

Endorsement notice
iTeh STANDARD PREVIEW
(standards.iteh.ai)

The text of ISO 899-1:2003 has been approved by CEN as EN ISO 899-1:2003 without any modifications.

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

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 62	1999	Plastics — Determination of water absorption	EN ISO 62	1999
ISO 291	1997	Plastics — Standard atmospheres for conditioning and testing	EN ISO 291	1997
ISO 472	1999	Plastics — Vocabulary	EN ISO 472	2001
ISO 527-1	1993	Plastics — Determination of tensile properties — Part 1: General principles	EN ISO 527-1	1996
ISO 527-2	1993	Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics	EN ISO 527-2	1996
ISO 10350-1	1998	Plastics — Acquisition and presentation of comparable single-point data — Part 1: Moulding materials	EN ISO 10350-1	2000
ISO 11403-1	2001	Plastics — Acquisition and presentation of comparable multipoint data — Part 1: Mechanical properties	EN ISO 11403-1	2003

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 899-1:2003

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

INTERNATIONAL STANDARD

ISO
899-1

Second edition
2003-06-01

Plastics — Determination of creep behaviour —

Part 1: Tensile creep

*Plastiques — Détermination du comportement au fluage —
Partie 1: Fluage en traction*
(standards.iteh.ai)

[SIST EN ISO 899-1:2003](https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003)

[https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-
be6ab177da9f/sist-en-iso-899-1-2003](https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003)



Reference number
ISO 899-1:2003(E)

© ISO 2003

ISO 899-1:2003(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 899-1:2003](https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

© ISO 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references	1
3 Terms and definitions.....	2
4 Apparatus.....	4
5 Test specimens	4
6 Procedure.....	5
7 Expression of results.....	6
8 Test report.....	9
Annex A (informative) Physical-ageing effects on the creep of polymers	11
Bibliography	15

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 899-1:2003](https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>

ISO 899-1:2003(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 899-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

This second edition cancels and replaces the first edition (ISO 899-1:1993), which has been technically revised.

ISO 899 consists of the following parts, under the general title *Plastics — Determination of creep behaviour*:

- *Part 1: Tensile creep* <https://standards.iteh.ai/catalog/standards/sist/078e880e-5ce6-401a-b299-be6ab177da9f/sist-en-iso-899-1-2003>
- *Part 2: Flexural creep by three-point loading*

Plastics — Determination of creep behaviour —

Part 1: Tensile creep

1 Scope

1.1 This part of ISO 899 specifies a method for determining the tensile creep of plastics in the form of standard test specimens under specified conditions such as those of pretreatment, temperature and humidity.

1.2 The method is suitable for use with rigid and semi-rigid non-reinforced, filled and fibre-reinforced plastics materials (see ISO 472 for definitions) in the form of dumb-bell-shaped test specimens moulded directly or machined from sheets or moulded articles.

1.3 The method is intended to provide data for engineering-design and research and development purposes. Data for engineering-design purposes requires the use of extensometers to measure the gauge length of the specimen. Data for research or quality-control purposes may use the change in distance between the grips (nominal extension).

1.4 Tensile creep may vary significantly with differences in specimen preparation and dimensions and in the test environment. The thermal history of the test specimen can also have profound effects on its creep behaviour (see Annex A). Consequently, when precise comparative results are required, these factors must be carefully controlled.

1.5 If tensile-creep properties are to be used for engineering-design purposes, the plastics materials should be tested over a broad range of stresses, times and environmental conditions.

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 62:1999, *Plastics — Determination of water absorption*

ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing*

ISO 472:1999, *Plastics — Vocabulary*

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