

SLOVENSKI STANDARD SIST EN ISO 899-2:2024

01-december-2024

Nadomešča:

SIST EN ISO 899-2:2003/A1:2015

Polimerni materiali - Ugotavljanje lezenja - 2. del: Lezenje pri tritočkovni obremenitvi (ISO 899-2:2024)

Plastics - Determination of creep behaviour - Part 2: Flexural creep by three-point loading (ISO 899-2:2024)

Kunststoffe - Bestimmung des Kriechverhaltens - Teil 2: Zeitstand-Biegeversuch bei Dreipunkt-Belastung (ISO 899-2:2024)

Plastiques - Détermination du comportement au fluage - Partie 2: Fluage en flexion par mise en charge en trois points (ISO 899-2:2024)

Ta slovenski standard je istoveten z: EN ISO 899-2:2024

ICS:

83.080.01 Polimerni materiali na

splošno

Plastics in general

SIST EN ISO 899-2:2024

en,fr,de

iTeh Standards (https://standards.iteh.ai) Document Preview

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 899-2

October 2024

ICS 83.080.01

Supersedes EN ISO 899-2:2003, EN ISO 899-2:2003/A1:2015

English Version

Plastics - Determination of creep behaviour - Part 2: Flexural creep by three-point loading (ISO 899-2:2024)

Plastiques - Détermination du comportement au fluage - Partie 2: Fluage en flexion par mise en charge en trois points (ISO 899-2:2024)

Kunststoffe - Bestimmung des Kriechverhaltens - Teil 2: Zeitstand-Biegeversuch bei Dreipunkt-Belastung (ISO 899-2:2024)

This European Standard was approved by CEN on 18 October 2024.

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

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

SIST EN ISO 899-2:2024

https://standards.iteh.ai/catalog/standards/sist/a26294da-d8e7-4067-b2ce-51736cd3737d/sist-en-iso-899-2-2024



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 899-2:2024 (E)

Contents	Pag
European foreword	

iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN ISO 899-2:2024

European foreword

This document (EN ISO 899-2:2024) 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 SIS.

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 April 2025, and conflicting national standards shall be withdrawn at the latest by April 2025.

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

This document supersedes EN ISO 899-2:2003.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

(https://standards.iteh.ai) Endorsement notice

The text of ISO 899-2:2024 has been approved by CEN as EN ISO 899-2:2024 without any modification.

SIST EN ISO 899-2:2024

iTeh Standards (https://standards.iteh.ai) Document Preview



International Standard

ISO 899-2

Plastics — Determination of creep behaviour —

Part 2:

Flexural creep by three-point loading ar ls

Plastiques — Détermination du comportement au fluage — 2000 S. 1100 S. 1100 S.

Partie 2: Fluage en flexion par mise en charge en trois points

Third edition 2024-10

ois points Preview

SIST EN ISO 899-2:202

ISO 899-2:2024(en)

iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN ISO 899-2:2024

https://standards.iteh.ai/catalog/standards/sist/a26294da-d8e7-4067-b2ce-51736cd3737d/sist-en-iso-899-2-2024



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

ISO 899-2:2024(en)

Contents		Page
Fore	eword	iv
1	Scope	1
2	Normative references	
3	Terms and definitions	
4	Apparatus	
5	Test specimens	
3	5.1 Shape and dimensions	
	5.2 Preferred specimen type	
	5.3 Other test specimens	
6	Procedure	
	6.1 General	5
	6.2 Conditioning and test atmosphere	5
	6.3 Measurement of test-specimen dimensions and distance between supports	
	6.4 Mounting the test specimens	
	6.5 Selection of stress value	
	6.6 Loading procedure	
	6.6.1 Preloading	
	6.6.2 Loading 6.7 Deflection-measurement schedule	
	6.8 Time measurement	
	6.9 Temperature and humidity control	7
	6.10 Measurement of recovery rate (optional)	7
7	Expression of results 1400 / Standards itah 21	
7	7.1 Method of calculation	
	7.1.1 Flexural-creep modulus 7.1.2 Flexural-creep compliance	7
	7.1.3 Flexural stress	8
	7.1.4 Flexural-creep strain ST FM ISO 200 2 2024	
	ns://standards7.1.5 aj/Time to rupture	
	7.1.6 Creep-strength limit	
	7.2 Presentation of results	9
	7.2.1 Creep curves	
	7.2.2 Creep-modulus/time curves	
	7.2.3 lsochronous stress-strain curves	
	7.2.4 Three-dimensional representation	
	7.2.5 Creep-to-rupture curves	
	7.3 Precision	
8	Test report	
Ann	nex A (informative) Physical-ageing effects on the creep of polymers	12
Bibl	liography	16

ISO 899-2:2024(en)

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical behavior*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 899-2:2003), which has been technically revised. It also incorporates the Amendment ISO ISO 899-2:2003/Amd. 1:2015.

The main changes are as follows:

- the accuracy requirements for the deflection measurement device have been updated;
- the normative references have been updated;
- the definition of "creep" has been adapted for clarity;
- the definitions for shape and dimensions of test specimens were adapted from ISO 178:2019;
- identified inconsistencies and mistakes have been corrected.

A list of all parts in the ISO 899 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.