SLOVENSKI STANDARD
oSIST prEN ISO 527-1:2010

01-junij-2010

Polimerni materiali - Določanje nateznih lastnosti - 1. del: Splošna načela (ISO/DIS 527-1:2010)

Plastics - Determination of tensile properties - Part 1: General principles (ISO/DIS 527-1:2010)

Kunststoffe - Bestimmung der Zugeigenschaften - Teil 1: Allgemeine Grundsätze (ISO/FDIS 527-1:2010)

Plastiques - Détermination des propriétés en traction - Partie 1: Principes généraux (ISO/DIS 527-1:2010)

Ta slovenski standard je istoveten z: **prEN ISO 527-1**

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general

oSIST prEN ISO 527-1:2010 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN ISO 527-1

April 2010

ICS 83.080.01

Will supersede EN ISO 527-1:1996

English Version

Plastics - Determination of tensile properties - Part 1: General principles (ISO/DIS 527-1:2010)

Plastiques - Détermination des propriétés en traction - Partie 1: Principes généraux (ISO/DIS 527-1:2010)

Kunststoffe - Bestimmung der Zugeigenschaften - Teil 1: Allgemeine Grundsätze (ISO/FDIS 527-1:2010)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 249.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

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

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Foreword

This document (prEN ISO 527-1:2010) 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 NBN.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 527-1:1996.

Endorsement notice

The text of ISO/DIS 527-1:2010 has been approved by CEN as a prEN ISO 527-1:2010 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 527-1

ISO/TC **61**/SC **2** Secretariat: **AENOR**

Voting begins on: **2010-04-08**

Voting terminates on: **2010-09-08**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Plastics — Determination of tensile properties —

Part 1:
General principles

Plastiques — Détermination des propriétés en traction —

Partie 1: Principes généraux

(Revision of first edition of ISO 527-1:1993, ISO 527-1:1993/Cor.1:1994 and ISO 527-1:1993/Amd.1:2005)

ICS 83.080.01

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

Conformément aux dispositions de la Résolution du Conseil 15/1993, ce document est distribué en version anglaise seulement.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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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 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 527-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *mechanical properties*.

This second edition cancels and replaces the first edition (ISO 527-1:1993), [of which has been technically revised.

ISO 527 consists of the following parts, under the general title *Plastics — Determination of tensile properties*:

— *Part 1: General principles*

— *Part 2 :Test conditions for moulding and extrusion plastics*

— *Part 3: Test conditions for films and sheets:*

— *Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites*

— *Part 5: Test conditions for unidirectional fibre-reinforced plastic composites*

Introduction

This revision of ISO 527-1 has changed compared to the former version in the following aspects:

— A method for the determination of of the Poisson ratio has been introduced. It is similar to the one used in ASTM D638, but in order to overcome difficulties with precision of the determination of the lateral contraction at small values of the longitudinal strain, the strain interval is extended far beyond the strain region for the modulus determination.

— Definitions and methods have been optimised for computer controlled tensile test machines.

— The gage length for use on the multipurpose test specimen has been increased from 50 mm to 75 mm. This will be used especially for Part 2 and be moved there. Part 1 will remain a general document.

— For multipurpose test specimens the strain after yielding is calculated as the sum of the strain at yield, determined with an extensometer, and the (nominal) strain increment, determined as post yield crosshead displacement relative to a nominal gage length of also 75 mm. For QC-purposes and where specified the continued use of 50 mm gage length is allowed

— Stress at break and nominal strain will be reinstated as discussed in Rome