SLOVENSKI STANDARD
SIST EN ISO 6383-2:2004

01-oktober-2004

Polimerni materiali - Filmi in folije - Ugotavljanje odpornosti proti trganju - 2. del: Elmendorfova metoda (ISO 6383-1:1983)

Plastics - Film and sheeting - Determination of tear resistance - Part 2: Elmendorf method (ISO 6383-2:1983)

Kunststoffe - Folien und Bahnen - Bestimmung der Reißfestigkeit - Teil 2: Elmendorf-Verfahren (ISO 6383-2:1983)

Plastiques - Film et feuille - Détermination de la résistance au déchirement - Partie 2: Méthode Elmendorf (ISO 6383-2:1983)

Ta slovenski standard je istoveten z: **EN ISO 6383-2:2004**

ICS:

83.140.10	Filmi in folije	Films and sheets

SIST EN ISO 6383-2:2004 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 6383-2

July 2004

ICS 83.140.10

English version

Plastics - Film and sheeting - Determination of tear resistance - Part 2: Elmendorf method (ISO 6383-2:1983)

Plastiques - Film et feuille - Détermination de la résistance au déchirement - Partie 2: Méthode Elmendorf (ISO 6383-2:1983)

Kunststoffe - Folien und Bahnen - Bestimmung der Reißfestigkeit - Teil 2: Elmendorf-Verfahren (ISO 6383-2:1983)

This European Standard was approved by CEN on 21 June 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

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

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

Ref. No. EN ISO 6383-2:2004: E

Foreword

The text of ISO 6383-2:1983 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 6383-2:2004 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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

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

Endorsement notice

The text of ISO 6383-2:1983 has been approved by CEN as EN ISO 6383-2:2004 without any modifications.

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

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	Title	EN	Year
ISO 291	1997	Plastics - Standard atmospheres for conditioning and testing	EN ISO 291	1997

International Standard 6383/2

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

Plastics — Film and sheeting — Determination of tear resistance — Part 2: Elmendorf method

Plastiques — Film et feuille — Détermination de la résistance au déchirement — Partie 2: Méthode Elmendorf

First edition — 1983-09-01

UDC 678.5/.8-416 : 620.176.245 Ref. No. ISO 6383/2-1983 (E)

Descriptors: plastics, tests, tear strength, tear tests, test specimens.

Price based on 6 pages

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6383/2 (formerly ISO/DIS 6824) was developed by Technical Committee ISO/TC 61, *Plastics*, and was circulated to the member bodies in February 1980.

It has been approved by the member bodies of the following countries:

Australia	Germany, F.R.	Philippines
Austria	Hungary	Poland
Belgium	India	Portugal
Brazil	Ireland	Romania
Canada	Israel	South Africa, Rep. of
China	Italy	Spain
Czechoslovakia	Japan	Switzerland
Egypt, Arab Rep. of	Korea, Rep. of	United Kingdom
Finland	Mexico	USA
France	Netherlands	USSR

The member body of the following country expressed disapproval of the document on technical grounds:

Sweden

Printed in Switzerland

Plastics — Film and sheeting — Determination of tear resistance — Part 2: Elmendorf method

0 Introduction

ISO 6383 consists of the following parts:

Part 1: Trouser tear method.

Part 2: Elmendorf method.

1 Scope and field of application

1.1 This part of ISO 6383 specifies a method of determining the force required to propagate a tear through a specified distance and from a specified slit, cut in a test specimen of thin flexible plastic sheeting or film, under specified conditions of loading.

The upper limit of thickness that can be tested depends on the tearing force of the material in relation to the capacity of the testing machine.

Materials that can be tested according to this method include flexible poly(vinyl chloride) (PVC) and polyolefin films, but variable elongation and oblique tearing effects on the more extensible films may cause poor reproducibility of test results. This method may not be suitable for testing more rigid materials such as rigid PVC, nylon and polyester films.

1.2 The tear resistance test specified by this method is applied to specimens cut from semi-finished and finished products. The test is suitable for the control of production and manufactured products as well as for acceptance or rejection testing under specifications for semi-finished and finished products, provided that it has been demonstrated that the data for a particular material are acceptably reproducible.

1.3 There is no direct linear relationship between tearing force and specimen thickness. Data from this method are expressed as tearing force in newtons, with specimen thickness also reported. Only data obtained at the same thickness should be compared because sets of data from specimens of dissimilar thickness are generally not comparable.

2 References

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

ISO 4591, *Plastics — Film and sheeting — Determination of average thickness of a sample and average thickness and yield of a roll by gravimetric techniques (gravimetric thickness).*

ISO 4593, *Plastics — Film and sheeting — Determination of thickness by mechanical scanning.*

3 Definition

For the purpose of this part of ISO 6383, the following definition applies.

tear resistance: The force, in newtons, required to tear a test specimen by the specified method.

4 Principle

A test specimen having a specified precut slit is subjected to a tearing force generated by the energy stored in a pendulum of specified dimensions. The energy expended in tearing the specimen is used to calculate the tear resistance of the specimen.

5 Apparatus

The test machine shall be of the Elmendorf type (an example of a suitable test machine is shown diagrammatically in figure 1), comprising the following.

5.1 Stationary jaw, accurately aligned with a movable jaw carried on a pendulum, preferably formed by a sector of a circle, free to swing on ball bearings or other substantially frictionless bearings. Each jaw shall have a clamping surface of not less than 25 mm in the horizontal direction [dimension b (see