

# SLOVENSKI STANDARD

## SIST EN ISO 4589-2:2017

01-julij-2017

Nadomešča:

SIST EN ISO 4589-2:2000

SIST EN ISO 4589-2:2000/A1:2006

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### Polimerni materiali - Določanje gorljivosti s kisikovim indeksom - 2. del: Preskus pri sobni temperaturi (ISO 4589-2:2017)

Plastics - Determination of burning behaviour by oxygen index - Part 2: Ambient-temperature test (ISO 4589-2:2017)

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Kunststoffe - Bestimmung des Brennverhaltens durch den Sauerstoff-Index - Teil 2: Prüfung bei Umgebungstemperatur (ISO 4589-2:2017)

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Plastiques - Détermination du comportement au feu au moyen de l'indice d'oxygène - Partie 2: Essai à la température ambiante (ISO 4589-2:2017)

**Ta slovenski standard je istoveten z: EN ISO 4589-2:2017**

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#### ICS:

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
83.080.01	Polimerni materiali na splošno	Plastics in general

**SIST EN ISO 4589-2:2017**

**en,fr,de**

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EUROPEAN STANDARD

EN ISO 4589-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 4589-2:1999

English Version

## Plastics - Determination of burning behaviour by oxygen index - Part 2: Ambient-temperature test (ISO 4589-2:2017)

Plastiques - Détermination du comportement au feu au moyen de l'indice d'oxygène - Partie 2: Essai à la température ambiante (ISO 4589-2:2017)

Kunststoffe - Bestimmung des Brennverhaltens durch den Sauerstoff-Index - Teil 2: Prüfung bei Umgebungstemperatur (ISO 4589-2:2017)

This European Standard was approved by CEN on 13 March 2017.

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

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN ISO 4589-2:2017) 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 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 November 2017 and conflicting national standards shall be withdrawn at the latest by November 2017.

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.

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ISO  
4589-2

Second edition  
2017-04

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**Plastics — Determination of burning  
behaviour by oxygen index —**

**Part 2:  
Ambient-temperature test**

*Plastiques — Détermination du comportement au feu au moyen de  
l'indice d'oxygène —*

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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.

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 documents 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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*.

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This second edition cancels and replaces the first edition (ISO 4589-2:1996), which has been technically revised. It also incorporates the Amendment ISO 4589-2:1996/Amd.1:2005.

A list of all parts in the ISO 4589 series can be found on the ISO website.

**ISO 4589-2:2017(E)****Introduction**

Oxygen index (OI) results obtained using the methods described in this document can provide a sensitive measure of the burning characteristics of materials under certain controlled laboratory conditions, and hence may be useful for quality control purposes. The results obtained are dependent upon the shape, orientation and isolation of the test specimen and the conditions of ignition. For particular materials or applications, it may be necessary or appropriate to specify different test conditions. Results obtained from test specimens of differing thickness or by using different ignition procedures may not be comparable and no correlation with flammability behaviour under other fire conditions is implied.

Results obtained in accordance with this document are not applicable to describe or appraise the fire hazard presented by a particular material or shape under actual fire conditions, unless used as one element of a fire risk assessment that takes into account all of the factors pertinent to the assessment of the fire hazard of a particular application for the material.

For assessing the flame propagation properties of cellular materials of density  $< 100 \text{ kg/m}^3$ , attention is drawn to the method described in ISO 3582.

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