

# INTERNATIONAL STANDARD

**ISO**  
**4589-2**

First edition  
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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 —*

*Partie 2: Essai à la température ambiante*



Reference number  
ISO 4589-2:1996(E)

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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.

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.

International Standard ISO 4589-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*.

Together with parts 1 and 3 (see below), this part of ISO 4589 cancels and replaces ISO 4589:1984.

This revision has been prepared to introduce the following changes relative to the 1984 edition:

- a) to amplify the requirements for equipment calibration (see clause 6 and annex A);
- b) to reduce the permissible deviations for the gas flow rate through the chimney at 40 mm/s from  $\pm 10$  mm/s to  $\pm 2$  mm/s;
- c) to introduce a relatively short procedure, as procedure C, intended for use for comparison purposes, to determine whether or not the oxygen index of a material lies above a specified minimum value;
- d) to introduce a new specimen (form VI) and a corresponding procedure for testing of thin films. Precision data for the new procedure are given in an informative annex.

ISO 4589 consists of the following parts, under the general title *Plastics — Determination of burning behaviour by oxygen index*:

- Part 1: *Guidance*
- Part 2: *Ambient-temperature test*
- Part 3: *Elevated-temperature test*

Annexes A and B form an integral part of this part of ISO 4589. Annexes C and D are for information only.