
**Flexible cellular polymeric materials —
Determination of tensile strength and
elongation at break**

*Matériaux polymères alvéolaires souples — Détermination de la résistance
à la traction et de l'allongement à la rupture*



Foreword

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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 1798 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

This third edition cancels and replaces the second edition (ISO 1798:1983), which has been technically revised.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet: central@iso.ch
X.400: c=ch; a=400net; p=iso; o=isocs; s=central

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WARNING - Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies a method for determining the strength and deformation properties of flexible cellular materials when a test piece is extended at a constant rate until it breaks.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1923:1981, *Cellular plastics and rubbers - Determination of linear dimensions*.

ISO 5893:1993, *Rubber and plastics test equipment - Tensile, flexural and compression types (constant rate of traverse) - Description*.

3 Definitions

For the purpose of this International Standard, the following definitions apply:

3.1 tensile strength: The maximum tensile stress applied during stretching a test piece to rupture.

3.2 elongation at break: The percentage elongation of a test piece at rupture.