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**Flexible cellular polymeric materials —  
Determination of compression set**

*Matériaux polymères alvéolaires souples — Détermination de la  
déformation rémanente après compression*



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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 1856 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This third edition cancels and replaces the second edition (ISO 1856:1980), which has been technically revised.

# Flexible cellular polymeric materials — Determination of compression set

**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 three methods for determining the compression set of flexible cellular materials.

At present, this International Standard applies only to latex and polyurethane foams of thickness greater than 2 mm. Methods for other materials will be added as required.

## 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, this publication do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

## 3 Term and definition

For the purposes of this International Standard, the following term and definition apply.

### 3.1

#### **compression set**

the difference between the initial thickness and the final thickness of a test piece of the cellular material after compression for a given time at a given temperature and after a given recovery time, the difference being referred to the initial thickness

## 4 Principle

A test piece is maintained for a specified time at a specified temperature under constant deflection and the effect on the thickness of the test piece noted after release.