

STANDARD

**6916-1**

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**Flexible cellular polymeric materials —  
Sponge and expanded cellular rubber  
products — Specification —**

**Part 1:**  
Sheeting

*Polymères alvéolaires souples — Caoutchoucs alvéolaires mousses et  
souples — Spécification —*

*Partie 1: Feuille*



Reference number  
ISO 6916-1:1995(E)

## 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 6916-1 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

ISO 6916 consists of the following parts, under the general title *Flexible cellular polymeric materials — Sponge and expanded cellular rubber products — Specification*:

- Part 1: *Sheeting*
- Part 2: *Mouldings and extrusions*

Annexes A to G form an integral part of this part of ISO 6916.

# Flexible cellular polymeric materials — Sponge and expanded cellular rubber products — Specification —

## Part 1: Sheeting

### 1 Scope

**1.1** This part of ISO 6916 classifies flexible cellular rubber products known as sponge and expanded rubber. The base material used in their manufacture may be natural rubber, reclaimed rubber or synthetic rubber, either alone or in combination. The only products included in this part of ISO 6916 are in the form of sheeting.

**1.2** This part of ISO 6916 does not apply to latex foam rubbers, shoe soling or other similar micro-cellular products, ebonite cellular rubbers, virgin or reconstituted flexible, semi-rigid urethane foams, virgin or reconstituted poly(vinyl chloride), or poly(vinyl chloride) blended with other polymers.

**1.3** Two types are specified, as follows:

Type 1: open-cell rubber (normally known as sponge rubber).

Type 2: closed-cell rubber (normally known as expanded rubber)

These types are further classified by division into classes, based on their relative resistance to the action of petroleum-based oils and/or temperature resistance, and grades, based on a specific range of compression-deflection requirements. The product can be further classified by the addition of a suffix letter to the type, class and grade designation to indicate additional requirements. This letter is then defined by a suffix number denoting a test method.

**1.4** Attention is drawn to the fact that most extruded or moulded shapes are of sizes too small for cutting standard test pieces. These are difficult to classify and

test by the methods given in this part of ISO 6916 and cannot, therefore, be tested using these procedures.

In the case of conflict between the provisions of this part of ISO 6916 and those of the detailed specification or test method for a particular product, the latter shall take precedence. Reference to the methods shall specifically state the desired test or tests.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6916. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 6916 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 188:1982, *Rubber, vulcanized — Accelerated ageing or heat-resistance tests.*

ISO 471:1995, *Rubber — Times temperatures and humidities for conditioning and testing.*

ISO 815:1991, *Rubber, vulcanized or thermoplastic — Determination of compression set at ambient, elevated or low temperatures.*

ISO 1431-1:1989, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static strain test.*

ISO 1817:1985, *Rubber, vulcanized — Determination of the effect of liquids.*