FINAL DRAFT
International Standard

ISO/FDIS 3386-1

Polymeric materials, cellular flexible — Determination of stress-strain characteristics in compression —

Part 1: Low-density materials

Matériaux polymères alvéolaires souples — Détermination de la caractéristique de contrainte-déformation relative en compression —

Partie 1: Matériaux à basse masse volumique

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Contents

Page

Foreword

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 3386-1:1986), which has been revised. It also incorporates the Amendment ISO 3386-1:1986/Amd 1:2010.

The main changes are as follows:

— revision of the text in the Scope, Clause 2 and 3;

— addition of a schematic representation of the test procedure in Clause 6;

A list of all parts in the ISO 3386 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The compression stress/strain characteristics is a measure of the load-bearing properties of the material, though not necessarily of its capacity to sustain a long-term load.

The compression stress/strain characteristics differs from the indentation hardness characteristics (as determined in accordance with ISO 2439), which are known to be influenced by the thickness and the tensile properties of the flexible cellular material under test, by the shape of the compression plate and by the shape and size of the test piece.

This document specifies a method for high-density materials and differs from part 1 in the following ways:

— It is mainly concerned with materials of density above 250 kg/m^3;

— Compression stress values have been deleted;

— It does not permit the use of a cylindrical test piece.