



# FINAL DRAFT International Standard

## ISO/FDIS 2440

### Flexible and rigid cellular polymeric materials — Accelerated ageing tests

*Matériaux polymères alvéolaires souples et rigides — Essais de  
vieillissement accéléré*

ISO/TC 45/SC 4

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## Foreword

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (others 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 fifth edition cancels and replaces the fourth edition (ISO 2440:2019) which has been technically revised.

The main changes are as follows:

- addition of [subclause 7.2](#);
- addition of [Clause 9](#);
- addition of a method for verification in [Annex A](#);
- addition of precision data in [Annex B](#).

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](http://www.iso.org/members.html).

## Introduction

The measurement of ageing effects, either by oxidation or hydrolysis by humidity, is used to assess the long-term behaviour of cellular polymeric materials under laboratory conditions. The physical properties of interest are measured before and after the application of the specified treatments.

Test conditions are given for open cellular latex, open- and closed-cell polyurethane foams, and closed-cell polyolefin foams.

The effect of the ageing procedures on any of the physical properties of the material can be examined, but those normally tested are either the elongation and tensile properties, or the compression or indentation hardness properties.

These tests do not necessarily correlate either with service behaviour or with ageing by exposure to light.

If desired, the ageing conditions contained in this document can be applied to composite structures containing any of the above types of cellular material. This can be helpful in the investigation of possible interactions between cellular materials and other substrates. Composite constructions can be in the form of complete finished products or representative small specimens cut there-from.

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