
International Standard



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Polymeric materials, cellular flexible — Polyvinylchloride foam sheeting — Specification

Matériaux polymères alvéolaires souples — Feuilles de mousse de polychlorure de vinyle — Spécifications

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 6453 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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0 Introduction

Flexible cellular polyvinylchloride (PVC) sheeting is available in two types as follows:

type 1 — open cell material;

type 2 — closed cell material.

The sheeting is graded according to hardness index, measured in accordance with ISO 2439. For type 1 sheeting, a single hardness level is specified, but for type 2 sheeting, a range is specified. For sheeting which is available in any thickness up to approximately 100 mm, the material indentation hardness index is specified. For type 2 material, which is normally available only in thicknesses much less than 50 mm, it is necessary to use a test piece consisting of a number of plies, and the product indentation hardness index is therefore specified.

Attention is drawn to the commercial availability of sheeting complying with the requirements of this International Standard and claimed to have flame retardant characteristics. Specific requirements for this type of sheeting cannot be included in this International Standard because no generally accepted method of test for flammability is available, although ISO 3795 (FMVSS 302) is commonly used in the motor industry. Efforts to devise such a method are being made at both the national and international levels. Sheetting with flame-retardant characteristics is normally coloured pink or printed with appropriate identification.

Further requirements on fogging and sound absorbance, and improvements in the method for assessing low-temperature characteristics, are under consideration.

1 Scope and field of application

This International Standard specifies requirements for flexible cellular PVC in the form of sheets up to 100 mm in thickness for use in applications involving dielectric (HF) welding (for example padding and quilting).

Two types of sheeting are specified as follows:

type 1 — open cell material;

type 2 — closed cell material.

2 References

ISO 105, *Textiles — Tests for colour fastness*

Section A03, *Grey scale for assessing staining*.

Section B01, *Colour fastness to light: Daylight*.

ISO 845, *Cellular rubbers and plastics — Determination of apparent density*.

ISO 1798, *Flexible cellular materials — Determination of tensile strength and elongation at break*.

ISO 1856, *Polymeric materials, cellular flexible — Determination of compression set*.

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

ISO 2439, *Polymeric materials, cellular flexible — Determination of hardness (indentation technique)*.