

INTERNATIONAL
STANDARD

ISO
7617-1

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Plastics-coated fabrics for upholstery —
Part 1:
Specification for PVC-coated knitted fabrics

Supports textiles revêtus de plastique pour ameublement et garniture —
Partie 1: Spécifications des étoffes tricotées revêtues de PVC

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Sampling.....	2
4 Testing and compliance.....	2
5 Technical requirements	2
6 Marking	6
7 Test report.....	6
Annex A (normative) Method of selecting test specimens	7
Annex B (normative) Determination of elongation and elastic recovery.....	10
Annex C (normative) Determination of resistance to print wear	12
Annex D (normative) Determination of skin-coat resistance of coated fabrics	14
Annex E (normative) Determination of colour fastness to rubbing	16
Bibliography.....	17

ISO 7617-1:2001(E)

NOTE When, exceptionally, the coated fabric is supplied as pre-cut pieces, the concepts of length and width become meaningless. In this case, the shape and dimensions of the pieces, as well as the tolerances on the dimensions, should preferably be defined by agreement between purchaser and supplier. It is recommended that the agreement include a scale drawing.

5.3.3 Thickness

The thickness of the coated fabric, measured in accordance with ISO 2286-3 under a pressure of 2 kPa, shall comply with the requirements of Table 1.

5.4 Physical requirements

5.4.1 Mass of coating per unit area

The mass of coating per unit area, measured in accordance with ISO 2286-2, shall comply with the requirements of Table 1.

5.4.2 Mechanical properties

The coated fabric shall comply with the requirements of Table 2.

5.4.3 Surface properties

The coated fabric shall comply with the requirements of Table 3.

5.4.4 Properties after ageing

After accelerated ageing for 168 h at 85 °C under the conditions described in ISO 1419:1995, method 1, the coated fabric shall comply with the requirements of Table 4.

5.4.5 Fire behaviour

The fire behaviour of the coated fabric shall comply with any existing local or national regulations.

NOTE It is not possible to specify *a priori* performance requirements for fire behaviour: finished items, which are made up of coated fabrics and include various fillings and structures, have to fulfil risk requirements. These risks depend directly on the place and environment of use. However, it is strongly recommended that manufacturers of coated fabrics give the users information regarding fire behaviour so that they may manufacture furnishings responding as well as possible to safety regulation requirements.

Table 1 — Thickness of coated fabric and mass of coating per unit area

Property	Unit	Solid coating	Slightly expanded coating	Expanded coating	Test method
Total mass of coating per unit area	g/m ²	≥ 480	≥ 480	≥ 600	ISO 2286-2
Thickness of coated fabric (nominal)	mm	0,75 to 1,0	0,85 to 1,15	1,10 to 1,40	ISO 2286-3
Tolerance on thickness	mm	± 0,07	± 0,10	± 0,15	

Table 2 — Mechanical-property requirements

Property	Unit	Solid coating	Slightly expanded coating	Expanded coating	Test method
Tensile strength	N				ISO 1421:1995, method 1
Longitudinal		≥ 250	≥ 250	≥ 250	
Transverse		≥ 150	≥ 150	≥ 150	
Elongation at break	%				ISO 1421:1995, method 1
Longitudinal		≥ 50	≥ 50	≥ 50	
Transverse		≥ 100	≥ 100	≥ 100	
Bursting strength	kPa	≥ 700	≥ 400	≥ 700	ISO 3303:1990, method B
Elongation (static)	%				Annex B
Longitudinal		≥ 5	≥ 12	≥ 8	
Transverse		≥ 35	≥ 80	≥ 70	
Elastic recovery	%				Annex B
Longitudinal		≥ 80	≥ 80	≥ 80	
Transverse		≥ 80	≥ 80	≥ 80	
Resistance to flexing	cycles	≥ 400 000	≥ 400 000	≥ 400 000	ISO 7854:1995, method B
or shear flexing and rubbing	strokes	≥ 50 000	≥ 50 000	≥ 50 000	ISO 5981:1997, method 2
Abrasion resistance ^a	cycles	≥ 700	≥ 700	≥ 700	Annex D
Coating adhesion	N				ISO 2411
Longitudinal		≥ 30	≥ 30	≥ 30	
Transverse		≥ 20	≥ 20	≥ 20	

^a Number of cycles without exposure of an intermediate layer under the outer skin.

Table 3 — Surface properties

Property	Test method	Solid coating	Slightly expanded coating	Expanded coating
Print wear	Annex C	≥ 3	≥ 3	≥ 3
Colour fastness to light	ISO 105-B02	≥ 6	≥ 6	≥ 6
Colour fastness to dry rubbing	Annex E	≥ (4 to 5)	≥ (4 to 5)	≥ (4 to 5)
Colour fastness to wet rubbing	Annex E	≥ (4 to 5)	≥ (4 to 5)	≥ (4 to 5)
Colour fastness to rubbing with soapy water ^a	Annex E	≥ (4 to 5)	≥ (4 to 5)	≥ (4 to 5)
Blocking resistance	ISO 5978	Separation without surface damage		

^a Same conditions as for wet rubbing, but replacing water by a 4 % aqueous solution of soap.

Table 4 — Properties after ageing

Property	Unit	Solid coating	Slightly expanded coating	Expanded coating	Test method
Resistance to flexing	cycles	≥ 400 000	≥ 400 000	≥ 300 000	ISO 7854:1995, method B
Resistance to shear flexing and rubbing	strokes	≥ 50 000	≥ 50 000	≥ 50 000	ISO 5981:1997, method 2

6 Marking

Each roll of coated fabric shall be supplied with a label with the following information:

- a) the name and/or trade mark of the manufacturer, and all details necessary for identification of the coated fabric;
- b) the grade of coated fabric: coating solid, slightly expanded or expanded;
- c) the roll number, and the batch number if this is necessary to trace the coated fabric;
- d) the colour;
- e) the length of coated fabric in the roll;
- f) the usable width;
- g) a reference to this part of ISO 7617 (i.e. ISO 7617-1).

7 Test report

The test report shall include at least the following:

- a) a reference to this part of ISO 7617 (i.e. ISO 7617-1);
- b) all details necessary for complete identification of the coated fabric tested;
- c) the grade of coated fabric (solid, slightly expanded or expanded coating);
- d) all details necessary for identification of the testing authority;
- e) an indication of compliance or non-compliance with this part of ISO 7617, and in the latter case a clear indication of the property or properties which led to non-compliance;
- f) details of the results obtained for the tests specified in 5.4.1, 5.4.2, 5.4.3 and 5.4.4;
- g) any observations resulting from the examinations specified in 5.1 and 5.2;
- h) the usable width of the coated fabric and the length of coated fabric in the rolls, as determined in 5.3.1 and 5.3.2;
- i) the thickness of the coated fabric as determined in 5.3.3;
- j) details of any deviations from the specified procedures, as well as any additional observations which may have a bearing on the results.