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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

## Textiles — Tests for colour fastness —

### Part X11:

#### Colour fastness to hot pressing

*Textiles — Essais de solidité des teintures —*

*Partie X11: Solidité des teintures au repassage à chaud*

## 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 105-X11 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This third edition cancels and replaces the second edition (included in ISO 105-X: 1984), of which it constitutes a minor revision.

ISO 105 was previously published in thirteen "parts", each designated by a letter (e.g. "Part A"), with publication dates between 1978 and 1985. Each part contained a series of "sections" each designated by the respective part letter and by a two-digit serial number (e.g. "Section A01"). These sections are now being republished as separate documents, themselves designated "parts" but retaining their earlier alphanumeric designations. A complete list of these parts is given in ISO 105-A01.

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.

# Textiles — Tests for colour fastness —

## Part X11: Colour fastness to hot pressing

### 1 Scope and field of application

**1.1** This part of ISO 105 specifies a method for determining the resistance of the colour of textiles of all kinds and in all forms to ironing and to processing on hot cylinders.

**1.2** Tests are given for hot pressing when the textile is dry, when it is wet and when it is damp. The end-use of the textile usually determines which test should be made.

### 2 References

ISO 105, *Textiles — Tests for colour fastness —*

*Part A01 : General principles of testing.*

*Part A02 : Grey scale for assessing change in colour.*

*Part A03 : Grey scale for assessing staining.*

ISO 139, *Textiles — Standard atmospheres for conditioning and testing.*

### 3 Principle

**3.1 Dry pressing.** A dry specimen is pressed with a heating device at a specified temperature and pressure for a specified time.

**3.2 Damp pressing.** A dry specimen is covered with a wet cotton adjacent fabric and pressed with a heating device at a specified temperature and pressure for a specified time.

**3.3 Wet pressing.** The upper surface of a wet specimen is covered with a wet cotton adjacent fabric and pressed with a heating device at a specified temperature and pressure for a specified time.

**3.4** The change in colour of the specimen and the staining of the adjacent fabric are assessed with the grey scales immediately and again after a period of exposure to air.

### 4 Apparatus

**4.1 Heating device,** consisting of a pair of smooth and parallel plates, equipped with an accurately controllable electrical heating system and giving a pressure on the specimen of  $4 \pm 1$  kPa (see 8.4). Heat should be transferred to the specimen from the upper side only; if the lower plate is equipped with a heating system which cannot be turned off, the heat resistant sheet (4.2) with which the device shall in any case be fitted (see 8.2 and 8.3) acts as a heat shield.

**4.2 Smooth heat resistant sheet,** of thickness 3 to 6 mm (see 8.2 and 8.3).

**4.3 Wool flannel,** of mass per unit area approximately 260 g/m<sup>2</sup>.

Two layers of this material are used to make a pad of thickness approximately 3 mm. Similar smooth wool fabrics or felt can be used to give a pad of thickness approximately 3 mm.

**4.4 Undyed, bleached and unmercerized cotton cloth,** of mass per unit area 100 to 130 g/m<sup>2</sup> and with a smooth surface.

**4.5 Cotton adjacent fabric,** measuring 10 cm × 4 cm.

**4.6 Grey scales for assessing change in colour and staining** (see clause 2).

### 5 Test specimen

**5.1** If the textile to be tested is fabric, use a specimen 10 cm × 4 cm.

**5.2** If the textile to be tested is yarn, knit it into fabric and use a piece 10 cm × 4 cm or wind it closely round a piece of thin inert material measuring 10 cm × 4 cm to form a layer having only the thickness of the yarn.

**5.3** If the textile to be tested is loose fibre, comb and compress enough of it to form a sheet 10 cm × 4 cm and sew the sheet on to a piece of cotton adjacent fabric to support the fibre.