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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Textiles — Tests for colour fastness —

Part X09:
Colour fastness to formaldehyde

Textiles — Essais de solidité des teintures

Partie X09: Solidité des teintures au formaldéhyde

Reference number
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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 105-X09 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 X09:
Colour fastness to formaldehyde

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 the action of formaldehyde vapour, as may be encountered in storehouses where fabrics are stored with materials which have undergone a crease-resistant treatment.

1.2 This method is not suitable for assessing changes in colour which may occur during crease-resist finishing with urea-formaldehyde products, or in subsequent treatment of the dyeing with solutions of formaldehyde.

2 References

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

Part A01 : General principles of testing.

Part A02 : Grey scale for assessing change in colour.

3 Principle

A specimen of the textile is exposed in a closed container to the action of gaseous formaldehyde. The change in colour of the specimen is assessed with the grey scale.

4 Apparatus and reagent

4.1 Glass bell-jar, having a capacity of 6 litres.

4.2 Glass frame, for suspending the specimen.

4.3 China dish, of capacity 50 ml.

4.4 Formaldehyde, solution (350 g/kg).

4.5 Grey scale for assessing change in colour (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 specimen 10 cm × 4 cm, or make a wick of parallel lengths 10 cm long and about 0,5 cm in diameter, tied near both ends.

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 it on to a piece of cotton adjacent fabric to support the fibres.

6 Procedure

6.1 Fix the specimen to the frame so that it hangs free over the china dish but does not come into direct contact with the formaldehyde solution in the latter.

6.2 Place 15 ml of the formaldehyde solution (4.4) in the dish.

6.3 Place the glass bell-jar over the glass frame, the specimen and the china dish.

6.4 Leave the specimen in the formaldehyde-saturated atmosphere at 20 ± 2 °C for 24 h. In tropical countries a temperature of 27 ± 2 °C may be used.

6.5 Remove the specimen and hang it for 24 h in fresh air in a room with indirect light and small changes in relative humidity.

6.6 Assess the change in colour of the specimen with the grey scale.

7 Test report

Report the numerical rating for change in colour of the specimen.

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