INTERNATIONAL STANDARD

ISO 105-X08

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Textiles — Tests for colour fastness —

Part X08:
Colour fastness to degumming

Textiles — Essais de solidité des teintures —
Partie X08: Solidité des teintures au décreusage

Reference number
ISO 105-X08:1994(E)

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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 105-X08 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This fourth edition cancels and replaces the third edition (ISO 105-X08:1987), of which it constitutes a technical 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.

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Textiles — Tests for colour fastness —

Part X08:
Colour fastness to degumming

1 Scope

This part of ISO 105 specifies a method for determining the resistance of the colour of textiles of all kinds, except loose fibre, to the action of soap solutions such as those used in degumming raw silk.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of ISO 105. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on ISO 105 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 105-A01:1994, *Textiles — Tests for colour fastness — Part A01: General principles of testing.*

ISO 105-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour.*

ISO 105-A03:1993, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining.*

ISO 105-F:1985, *Textiles — Tests for colour fastness — Part F: Standard adjacent fabrics.*

3 Principle

A specimen of the textile in contact with adjacent fabrics is treated with a soap solution, then rinsed and dried. The change in colour of the specimen and the staining of the adjacent fabrics are assessed by comparison with the grey scales.

4 Apparatus and reagents

4.1 Vessel, of capacity 500 ml, with appropriate **reflux condenser**.

4.2 Soap, containing not more than 5 % moisture and complying with the following requirements based on dry mass:

— free alkali, calculated as Na_2CO_3: 0,3 g/kg maximum;

— free alkali, calculated as NaOH: 1 g/kg maximum;

— total fatty matter: 850 g/kg minimum;

— titre of mixed fatty acids prepared from soap: 30 °C maximum;

— iodine value: 50 maximum.

The soap shall be free from fluorescent brightening agents.

4.3 Soap solution, containing 7 g of soap (4.2) per litre of grade 3 water (4.5).

4.4 Sodium carbonate, anhydrous (Na_2CO_3).

4.5 Grade 3 water, (see ISO 105-A01:1994, subclause 8.1).

4.6 Two single-fibre adjacent fabrics, one piece made of raw silk, complying with section F06 of ISO 105-F:1985, the other made of the same kind of fabric as that of the textile to be tested or that predominating in the case of blends, complying with the relevant section of F01 to F08 of ISO 105-F:1985.

4.7 Grey scale for assessing change in colour, complying with ISO 105-A02, and **grey scale for assessing staining,** complying with ISO 105-A03.

5 Test specimen

5.1 If the textile to be tested is fabric, attach a specimen measuring 40 mm × 100 mm between the two single-fibre adjacent fabrics (4.6), also measuring 40 mm × 100 mm, by sewing along one of the shorter sides.

5.2 If the textile to be tested is yarn, knit it into fabric and treat it as in 5.1 or form a layer of parallel lengths of it between the two adjacent fabrics (4.6), the amount of yarn taken being approximately equal to half the combined mass of the adjacent fabrics. Sew along all four sides to hold the yarn in place and to form a composite specimen.

6 Procedure

6.1 Treat the composite specimen in the vessel (4.1) for 10 min under reflux with a lightly boiling soap solution (4.3) at a liquor ratio of 100:1.

6.2 After 10 min, add 0,5 g of anhydrous sodium carbonate (4.4) per litre of the boiling soap solution and keep boiling lightly for another 110 min (2 h in all).

6.3 Remove the composite specimen from the soap solution, rinse twice in cold grade 3 water (4.5) and then for 10 min in cold, running tap-water. Squeeze the composite specimen thoroughly, open it out (by breaking the stitching on all sides except one of the shorter sides, if necessary) and dry it by hanging it in air at a temperature not exceeding 60 °C, with the three parts in contact only at the remaining line of stitching.

6.4 Assess the change in colour of the specimen and the staining of the adjacent fabrics by comparison with the grey scales (4.7).

7 Test report

The test report shall include the following information:

a) the number and year of publication of this part of ISO 105, i.e. ISO 105-X08:1994;

b) all details necessary for the identification of the sample tested;

c) the numerical grey scale rating for the change in colour of the specimen;

d) the numerical grey scale rating for staining of each kind of adjacent fabric used.

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Descriptors: textiles, dyes, tests, determination, colour fastness, soaps.

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