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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Textiles — Tests for colour fastness —

Part X05:
Colour fastness to organic solvents

Textiles — Essais de solidité des teintures —

Partie X05: Solidité des teintures aux solvants organiques

Reference number
ISO 105-X05 : 1987 (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.

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-X05 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.

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Textiles — Tests for colour fastness —

Part X05: Colour fastness to organic solvents

1 Scope and field of application

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 organic solvents. If dry cleaning is involved, use the method specified in ISO 105, *Textiles — Tests for colour fastness — Part D01 : Colour fastness to dry cleaning.*

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.

3 Principle

A specimen of the textile in contact with adjacent fabrics is agitated in the solvent and dried. The change in colour of the specimen and the staining of the adjacent fabrics are assessed with the grey scales.

4 Apparatus and reagents

4.1 Suitable container, with means of agitation (see 8.1).

4.2 Specified solvent(s) (see 8.2).

4.3 Two adjacent fabrics, each measuring 10 cm × 4 cm, one piece made of the same kind of fibre as that of the textile to be tested, or that predominating in the case of blends, the second piece made of the fibre as indicated in the table below or, in the case of blends, of the kind of fibre second in order of predominance, or as otherwise specified.

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

If first piece is :	Second piece to be :
cotton	wool
wool	cotton
silk	cotton
linen	wool
viscose	wool
acetate or triacetate	viscose
polyamide	wool or cotton
polyester	wool or cotton
acrylic	wool

5 Test specimen

5.1 If the textile to be tested is fabric, place a specimen 10 cm × 4 cm between the two adjacent fabrics (4.3) and sew along all four sides to form a composite specimen.

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 pieces of adjacent fabric (4.3), 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.

5.3 If the textile to be tested is loose fibre, comb and compress an amount approximately equal to half the combined mass of the adjacent fabrics (4.3) to form a sheet 10 cm × 4 cm. Place the sheet between the two adjacent fabrics and sew along all four sides to hold the fibres in place and to form a composite specimen.

6 Procedure

6.1 Agitate the composite specimen continuously for 30 min in the solvent at room temperature, at a liquor ratio of 40 : 1. If the agitation is by hand, the specimen should be pressed against the container every 2 min with a glass rod (see 8.1), without removing the specimen from the solvent.

6.2 Squeeze excess solvent from the specimen and dry it by hanging it in air at a temperature of 80 ± 2 °C without unstitching. Take the precautions necessary for safety in drying flammable or explosive solvents.

6.3 Remove the stitching and assess the change in colour of the specimen and the staining of the adjacent fabrics with the grey scales.

7 Test report

Report the solvent used, the numerical rating for change in colour and the numerical rating for colour staining of each kind of adjacent fabric used.

8 Notes

8.1 A 500 ml beaker or other suitable open container may be used for the test, agitation being by hand with a glass rod flattened at one end. A closed vessel agitated by shaking or tumbling on a hand- or motor-driven machine may also be used.

8.2 The test should be carried out with the solvent or solvents commonly employed in the country concerned.

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