INTERNATIONAL STANDARD

ISO 105-J01

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Textiles — Tests for colour fastness —

Part J01:
Method for the measurement of colour and colour differences

Textiles — Essais de solidité des teintures —

Partie J01: Méthode de mesurage de la couleur et des différences de couleur

Reference number
ISO 105-J01 : 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-J01 was prepared by Technical Committee ISO/TC 38, *Textiles.*

This second edition cancels and replaces the first edition (included in ISO 105-J : 1982), 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.

Printed in Switzerland

Textiles — Tests for colour fastness —

Part J01:
Method for the measurement of colour and colour differences

1 Scope and field of application

This part of ISO 105 specifies a method intended for use in measuring the colour of a textile specimen or in measuring the colour difference between two specimens of textile in any form.

2 References

CIE Publication No. 15.2 : 1986, *Colorimetry* (second edition). [1)]

Supplement No. 2 to CIE Publication No. 15, *Recommendations on uniform color spaces — color difference equations — psychometric color terms.* [1)]

3 Principle

This part of ISO 105 selects from the several options published by the International Commission on Illumination (CIE) those best suited to the needs of the textile industry whenever the colour of a textile specimen or the magnitude of the colour difference between two specimens has to be quantified.

4 Methods of test

4.1 Determination of basic colorimetric data

4.1.1 Whenever it is desirable to minimize the variations in reflectance values obtained from different spectrophotometers, the specular component shall be included.

4.1.2 The reflectance values shall be converted into X, Y and Z tristimulus values using the colour matching functions (spectral tristimulus values) in the CIE 1964 supplementary standard colorimetric system (10° observer data) for Illuminant D_{65}.

4.1.3 Whenever a master standard is established, the tristimulus values shall be converted into the x, y chromaticity co-ordinates and recorded together with the Y tristimulus value.

1) These publications are available from the
Central Bureau of the CIE
P.O. Box 169
A-1033 Vienna
Austria.