

# INTERNATIONAL STANDARD

**ISO**  
**105-D01**

Fourth edition  
1993-11-01

---

---

## **Textiles — Tests for colour fastness —** **Part D01:** Colour fastness to dry cleaning

*Textiles — Essais de solidité des teintures —*

*Partie D01: Solidité des teintures au nettoyage à sec*



Reference number  
ISO 105-D01:1993(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-D01 was prepared by Technical Committee ISO/TC 38, *Textiles*, Sub-Committee SC 1, *Tests for coloured textiles and colorants*.

This fourth edition cancels and replaces the third edition (ISO 105-D01:1987), 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.

© ISO 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization

Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# Textiles — Tests for colour fastness —

## Part D01:

## Colour fastness to dry cleaning

### 1 Scope

**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 dry cleaning.

**1.2** This method is not suitable for the evaluation of the durability of textile finishes, nor is it intended for use in evaluating the resistance of colours to spot and stain removal procedures used by the dry-cleaner.

**1.3** This test covers colour fastness to dry cleaning only; commercial dry-cleaning practice normally involves other operations such as water spotting, solvent spotting, steam pressing, etc., for which other standard test methods are available if the full "dry cleanability" of the textile is to be assessed.

**1.4** The presence of absorbed water in either the fabric or the dry-cleaning solution, or the presence of a detergent and water in the dry-cleaning solution, has not been found to be a critical factor in assessing colour fastness. This test gives results which correlate satisfactorily with those obtained in commercial dry cleaning.

**1.5** Fastness to dry cleaning, without further qualification, means fastness to dry cleaning in perchloroethylene. However, if required, other solvents may be used.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part 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 this part of 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-A01:1989, *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.*

### 3 Principle

A specimen of the textile in contact with a cotton fabric bag together with non-corrodible steel discs is agitated in perchloroethylene (see 1.3 to 1.5), then squeezed or centrifuged, and dried in hot air. The change in colour of the specimen is assessed with the grey scale for assessing change in colour. At the conclusion of the test, the coloration of the solvent is assessed by comparing the filtered solvent with unused solvent by transmitted light, by means of the grey scale for assessing staining.

### 4 Apparatus and materials

**4.1 Suitable mechanical device**, consisting of a water bath containing a rotatable shaft which supports, radially, glass or stainless steel containers (4.2), the bottom of the containers being 45 mm  $\pm$  10 mm from the centre of the shaft. The