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Textiles — Tests for colour fastness — Part A01: General principles of testing

Textiles — Essais de solidité des coloris —

Partie A01: Principes généraux pour effectuer les essais



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

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 105-A01 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This sixth edition cancels and replaces the fifth edition (ISO 105-A01:1994), which has been revised to list the current ISO 105 standards, Clause 2 has been editorially revised, and other editorial revisions have been made to update the fifth edition.

ISO 105 consists of the following parts, under the general title *Textiles — Tests for colour fastness*:

General principles:

- *Part A01: General principles of testing*
- *Part A02: Grey scale for assessing change in colour*
- *Part A03: Grey scale for assessing staining*
- *Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics*
- *Part A05: Instrumental assessment of change in colour for determination of grey scale rating*
- *Part A06: Instrumental determination of 1/1 standard depth of colour*
- *Part A08: Vocabulary used in colour measurement*
- *Part A11: Determination of colour fastness grades by digital imaging techniques (under development)*

Colour fastness to light and weathering:

- *Part B01: Colour fastness to light: Daylight*
- *Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*
- *Part B03: Colour fastness to weathering: Outdoor exposure*
- *Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test*

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- *Part B05: Detection and assessment of photochromism*
- *Part B06: Colour fastness and ageing to artificial light at high temperatures: Xenon arc fading lamp test*
- *Part B07: Colour fastness to light of textiles wetted with artificial perspiration*
- *Part B08: Quality control of blue wool reference materials 1 to 7*
- *Part B10: Artificial weathering — Exposure to filtered xenon-arc radiation (under development)*

Colour fastness to washing and laundering:

- *Part C06: Colour fastness to domestic and commercial laundering*
- *Part C07: Colour fastness to wet scrubbing of pigment printed textiles*
- *Part C08: Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a low temperature bleach activator*
- *Part C09: Colour fastness to domestic and commercial laundering — Oxidative bleach response using a non-phosphate reference detergent incorporating a low temperature bleach activator*
- *Part C10: Colour fastness to washing with soap or soap and soda*
- *Part C12: Colour fastness to industrial laundering*

Colour fastness to dry cleaning:

- *Part D01: Colour fastness to dry cleaning using perchloroethylene solvent*
- *Part D02: Colour fastness to rubbing: Organic solvents*

Colour fastness to aqueous agents:

- *Part E01: Colour fastness to water*
- *Part E02: Colour fastness to sea water*
- *Part E03: Colour fastness to chlorinated water (swimming-pool water)*
- *Part E04: Colour fastness to perspiration*
- *Part E05: Colour fastness to spotting: Acid*
- *Part E06: Colour fastness to spotting: Alkali*
- *Part E07: Colour fastness to spotting: Water*
- *Part E08: Colour fastness to hot water*
- *Part E09: Colour fastness to potting*
- *Part E10: Colour fastness to decatizing*
- *Part E11: Colour fastness to steaming*
- *Part E12: Colour fastness to milling: Alkaline milling*

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- *Part E13: Colour fastness to acid-felting: Severe*
- *Part E14: Colour fastness to acid-felting: Mild*
- *Part E16: Colour fastness to water spotting on upholstery fabrics*

Standard adjacent fabrics:

- *Part F01: Specification for wool adjacent fabric*
- *Part F02: Specification for cotton and viscose adjacent fabrics*
- *Part F03: Specification for polyamide adjacent fabric*
- *Part F04: Specification for polyester adjacent fabric*
- *Part F05: Specification for acrylic adjacent fabric*
- *Part F06: Specification for silk adjacent fabric*
- *Part F07: Specification for secondary acetate adjacent fabric*
- *Part F09: Specification for cotton rubbing cloth*
- *Part F10: Specification for adjacent fabric: Multifibre*

Colour fastness to atmospheric contaminants:

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Measurement of colour and colour differences:

- *Part J01: General principles for measurement of surface colour*
- *Part J02: Instrumental assessment of relative whiteness*
- *Part J03: Calculation of colour differences*
- *Part J05: Method for the instrumental assessment of the colour inconstancy of a specimen with change in illuminant (CMCCON02)*

Colour fastness to bleaching agencies:

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- *Part N03: Colour fastness to bleaching: Sodium chlorite (mild)*
- *Part N04: Colour fastness to bleaching: Sodium chlorite (severe)*

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— *Part X05: Colour fastness to organic solvents*

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— *Part X07: Colour fastness to cross-dyeing: Wool*

— *Part X08: Colour fastness to degumming*

— *Part X09: Colour fastness to formaldehyde*

— *Part X10: Assessment of migration of textile colours into polyvinyl chloride coatings*

— *Part X11: Colour fastness to hot pressing*

— *Part X12: Colour fastness to rubbing*

— *Part X13: Colour fastness of wool dyes to processes using chemical means for creasing, pleating and setting*

— *Part X14: Colour fastness to acid chlorination of wool: Sodium dichloroisocyanurate*

— *Part X16: Colour fastness to rubbing—Small areas*

— *Part X18: Assessment of the potential to phenolic yellowing of materials*

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— *Part Z02: Colour fastness to metals in the dye-bath: Iron and copper*

— *Part Z03: Intercompatibility of basic dyes for acrylic fibres*

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- *Part Z04: Dispersibility of disperse dyes*
- *Part Z05: Determination of the dusting behaviour of dyes*
- *Part Z06: Evaluation of dye and pigment migration*
- *Part Z07: Determination of application solubility and solution stability of water-soluble dyes*
- *Part Z08: Determination of solubility and solution stability of reactive dyes in the presence of electrolytes*
- *Part Z09: Determination of cold water solubility of water-soluble dyes*
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