***भारतीय मानक***

***Indian Standard***

**IS /** **ISO 105- B04:2024**

(Superseding IS/ISO 105-B04:1994)

***वस्त्रादि — रंग के पक्केपन का परीक्षण* –— *भाग* B04: *कृत्रिम अपक्षय के प्रति रंग का पक्कापन: जेनॉन आर्क फेडिंग लैंप परीक्षण***

*(*पहला पुनरीक्षण*)*

**Textiles — Tests for colour fastness —**

**Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test**

*(First Revision)*

ICS 59.080.01

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मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

NEW DELHI - 110002

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**XXXX 2024 Price Group X**

Chemical Methods of Test Sectional Committee, TXD 05

NATIONAL FOREWORD

This Indian Standard (Part B04) (First Revision) which is identical with ISO 105- B04:2024 ‘Textiles — Tests for colour fastness — Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test’ issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Chemical Methods of Test Sectional Committee and approval of the Textiles Division Council.

This Indian standard was originally published in 1994 which was identical with ISO 105-B04:1994.

This standard supersedes IS 6152 : 1985 ‘Methods for determination of colour fastness of textile materials to weathering by xenon arc lamp (first revision)’.

The first revision of this standard has been undertaken to harmonize it with the latest version of ISO 105-B04 : 2024.

Colour fastness of dyed/printed textile materials to various agencies during their further treatment or actual use is an important performance requirement from the viewpoint of the user or consumer. The various agencies to which textile materials may be subsequently subjected may include water, acids, alkalis, organic solvents, washing, laundering, dry-cleaning, perspiration, light, gaseous fumes, bleaching, rubbing, carbonizing, felting, etc, and the colour of textile materials should be fast to these agencies and should not change considerably. The colour should also not bleed and stain the adjacent fabric which is subjected to these agencies along with coloured fabric. The colour fastness property of coloured textiles is, therefore, measured in terms of colour fastness ratings with respect to change in colour and/or staining of adjacent fabric.

Since colour fastness is one of the most important requirements for export of textiles, it is considered essential that Indian Standards related to colour fastness are completely harmonized with International Standards. The various Indian Standards on colour fastness testing, are, therefore, being published/ revised to align them with the corresponding International Standards published in Parts A to Z.

This standard finds application in measurement of colour fastness of textile materials to the action of weather as determined by exposure to simulated weathering conditions in a cabinet equipped with a xenon arc lamp.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
2. Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard reference appears to certain International Standard for which Indian Standard also exist. The corresponding Indian Standards which are to be substituted in their respective places are listed below along with their degree of equivalence for the editions indicated:

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| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 105-A01, Textiles — Tests for colour fastness — Part A01: General principles of testing | IS/ISO 105-A01 : 2010  Textiles – Tests for colour fastness Part A01 General principles of testing (*first revision*) | Identical with ISO 105-A01 : 2010. |
| ISO 105-A02, Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour | IS/ISO 105-A02 :1993  Textiles — Tests for colour fastness Part A02 Grey scale for assessing change in colour | Identical with ISO 105-A02:1993. |
| ISO 105-A05, Textiles — Tests for colour fastness — Part A05: Instrumental assessment of change in colour for determination of grey scale rating | IS/ISO 105-A05 :1996  Textiles — Tests for colour fastness Part A05 Instrumental assessment of change in determination of grey scale rating | Identical with ISO 105-A05:1996. |
| ISO 105-B01, Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight | IS/ISO 105-B01 : 2014  Textiles — Tests for colour fastness Part B01 Colour fastness to light : daylight | Identical with ISO 105-B01:2014. |
| ISO 105-B02: 2014, Textiles  — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test | IS/ISO 105-B02 : 2014  Textiles — Tests for colour fastness Part B02 Colour fastness to artificial light : Xenon arc fading lamp test | Identical with ISO 105-B02:2014. |
| ISO 4892-1, Plastics —  Methods of exposure to  laboratory light sources — Part  1: General guidance | IS 17863 (Part 1) : 2022/  ISO 4892-1 : 2016  Plastics — Methods of exposure to  laboratory light sources  Part 1 General guidance | Identical with ISO  4892-1: 2016. |
| ISO 9370, Plastics —  Instrumental determination of  radiant exposure in weathering  tests — General guidance and  basic test method | IS 17864 : 2022/  ISO 9370 : 2017  Plastics — Instrumental  determination of radiant exposure  in weathering tests — General  guidance and basic test method | Identical With ISO  9370 : 2017. |

The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

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| --- | --- |
| *International/Other Standard* | *Title* |
| ISO 105-B08:1995 | Textiles — Tests for colour fastness Part B08: Quality control of blue wool reference materials 1 to 7 |

In reporting the result of a test or analysis made in accordance with this standard, if the final value; observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*).