



UNDERSTANDING OF COLORFASTNESS TO WASHING – CONCLUDING PART

REF: TT/ JUNE 2020 / WK 1

Washing Fastness testing standards

There are various testing standards globally. Some retailers have also re-designed their own. Following are different types of Textile and Garments International Testing methods –

- International Organization for Standardization (ISO)
- American Association of Textile Chemists and Colorists (AATCC)
- Japan Industrial Standards (JIS)
- Korean Standards (KS)
- China National Standards (GB)
- DeutschesInstitut fur Normung (DIN)

ISO and AATCC are the mostly used testing standards.

ISO testing methods - ISO 105 CO6 testing method is the British standard method for determining the resistance of the color on all types of fibers to domestic or commercial laundering.

In this method, a testing specimen of specified size is prepared. The dyed or printed fabric is sandwiched between an undyed fabric and a standard multifiber strip. The multifiber strip has a repeat of Acetate, Bleached cotton, Nylon, Polyester, Acrylic and Wool fibres.



Fig 1.1 Testing specimen for washing fastness test



The bath is prepared using ISO reference detergent and soda ash. The test sample is dipped into the solution along with 20-25 steel balls. This is then agitated in a machine called Rota dyer for 30 mins at 60°C [ISO 105 C06 (C2S)]. The treated sample is taken out, washed and dried. It is then compared against untreated sample for color change due to washing. The staining on multifiber strip is checked for staining on different types of fibers.



Fig 1.2 Rota dyer

SDC (Society of Dyers and Colorists) grey scale is used to rate the color change and staining. SDC grey scale is onto the scale of 1-5. Rating of 5 is considered to have very good wash fastness property and 1 as poor.

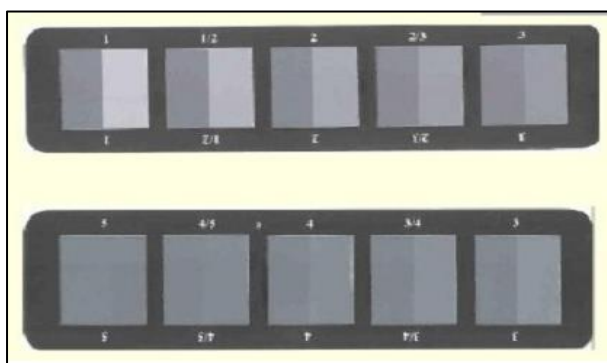


Fig 1.3 Grey Scale for shade change

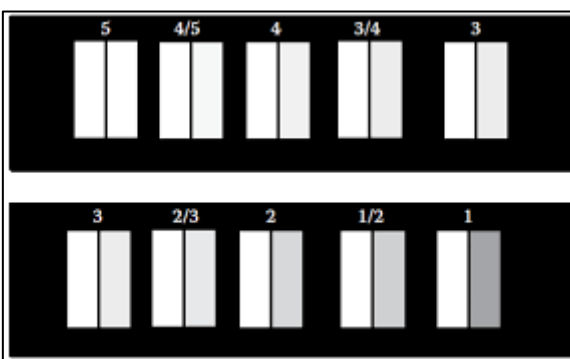


Fig 1.4 Grey Scale for assessing staining on other fibers

AATCC testing methods – AATCC 61 testing method is the American testing method for determining the resistance of the color on all types of fibers to domestic or commercial laundering. The procedure is same to that of ISO except AATCC detergent is used during washing.

Wishing you a great week ahead!

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arc@resil.com | www.resil.com.