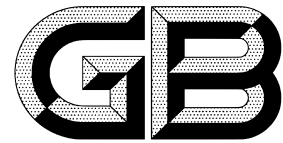


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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31127-2014

**Textiles - Tests for colour fastness - Colour fastness to transfer
in joints**

纺织品 色牢度试验 拼接互染色牢度

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Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard was proposed by China National Textile and Apparel Council.

This Standard shall be under the jurisdiction of National Technical Committee 209 on Textiles of Standardization Administration of China (SAC/TC 209/SC 1).

The drafting organizations of this Standard: Shenzhen Academy of Metrology & Quality Inspection, Textile Industry Standardization Institute, China Lilang Limited, Joeone Co., Ltd.

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1 Scope

This Standard specifies two test methods for determining the colour fastness to transfer in joints of textiles, namely the washing method and the soaking method.

This Standard applies to all kinds of textiles that are stitched from dark and lightcolored textiles. Non-stitched textiles can implement by reference.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6682, Water for analytical laboratory use - Specification and test methods
FZ/T 01023, Instrumental assessment of the degree of staining of adjacent fabrics

3 Principle

3.1 Washing method

Place the sample in the specified washing solution; perform a mechanical agitation under the conditions of the specified bath ratio, time and temperature; wash and dry; then, use the grey scale for assessing staining or the instrument to assess the staining of the sample.

3.2 Soaking method

Place the sample in the specified washing solution for treatment;

4 Equipment

A suitable mechanical washing device which is composed of a water bath that is equipped with a rotating shaft. The rotating shaft supports multiple stainless steel containers, of

which the capacity is (550 ± 50) mL, in a radial shape; the diameter is (75 ± 5) mm; the height is (125 ± 10) mm; the distance from the center of the shaft to the bottom of the container is (45 ± 10) mm. The speed of the shaft and the container is (40 ± 2) r/min. The temperature of the water bath is controlled by a thermostat, so as to keep the test solution within the specified temperature of $\pm 2^{\circ}\text{C}$.

4.2 Test device B

It consists of a pair of stainless-steel frames and a counterweight, of which the mass is about 5 kg, and the bottom area is about 115 mm $\times$ 60 mm. It is also attached with a glass or acrylic resin plate whose size is about 115 mm $\times$ 60 mm $\times$ 1.5 mm.

4.3 Thermostat

4.4 Device for preheating washing solution

Such as water bath heating instrument.

4.5 Balance

5 Reagents and materials

5.1 ECE standard washing agent

ECE standard washing agent that does not contain fluorescent brightener; its composition is as follows:

Linear-alkylbenzene sulfonic acid (the average chain length of alkane carbon chain is C11.5) 8.00 ± 0.02 Polyvinyl ester (the ethylene oxide number is 14) 2.90 ± 0.02 Ethylene diamine tetraacetic acid (EDTA) 0.20 ± 0.02

5.2 Grade-3 water

5.3 Filter paper

5.4 Grey scale for assessing staining

5.5 Spectrophotometer or colorimeter

6 Sample preparation

On the two fabric samples that need to be jointed together, cut a sample of (100 ± 2) mm $\times$ (40 ± 2) mm respectively; attach the front sides of the two samples together; joint along a short side to form a combined sample. For finished products that have been jointed, in the case that the used method doesn't affect pressure requirements of the sample, the