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

**GB/T 29865-2013**

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**Textiles - Tests for colour fastness - Colour fastness to rubbing  
- Small areas**

纺织品 色牢度试验 耐摩擦色牢度 小面积法

**(English Translation)**

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### Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents.

This Document replaced GB/T 29865-2013 Textiles - Tests for Color Fastness - Color Fastness

to Rubbing - Small Areas. Compared with GB/T 29865-2013, the major technical changes are

as follows besides the structural adjustments and editorial modifications:

--- Change the requirements for rubbing cloth; and replace GB/T 7568.2 with GB/T 33729 (see 5.2 of this Edition; 4.2 of the 2013 Edition);

--- Change the "NOTE" in 5.3 to a clause (see 5.3 of this Edition; 4.3 of the 2013 Edition);

--- Add the content related to "balance" (see 5.5 of this Edition);

--- Add a clause on "reagents"; add a reference to GB/T 6682; and supplement the requirements for test water (see Clause 6 of this Edition);

--- Add the description "Under negotiation between the relevant parties, it is also possible to adjust the humidity under the optional standard atmosphere specified in GB/T 6529,

which shall be stated in the test report. The specimen and rubbing cloth are placed on a sieve or a perforated rack for humidity-adjusting. For example, fabrics such as cotton or wool may require a longer humidity-adjusting time." (see 7.3 of this Edition; 5.3 of the

**2013 Edition);**

--- Change the requirements for humidity-adjusting before rating (see 8.2 of this Edition;

**6.2 of the 2013 Edition);**

--- Change "moisture content" into "liquid carrying rate"; and add the calculation formula of liquid carrying rate (see 8.3 of this Edition; 6.3 of the 2013 Edition);

--- Add "If the specimen is yarn and the sample preparation method of weaving into fabric is adopted, its organizational structure shall be indicated" to the test report (see Clause

**10 of this Edition; Clause 10 of the 2013 Edition).**

This Document modified and adopted ISO 105-X16:2016 Textiles - Tests for Color Fastness -

Part X16: Color Fastness to Rubbing - Small Areas. Compared with ISO 105-X16:2016, this Document made the following structural adjustment:

--- Add "Terms and Definitions" (see Clause 3 of this Document);

--- Add "Reagents" (see Clause 6 of this Document);

--- Merge the contents of 6.4 in ISO 105-X16:2016 into 6.3 (see 8.3 of this Document; 6.3 and 6.4 of ISO 105-X16:2016).

Textiles - Tests for Color Fastness - Color Fastness to Rubbing - Small Areas

## **1 Scope**

This Document describes the test method for the color fastness to rubbing of textiles, where the

test area is smaller than the test area specified in GB/T 3920.

This Document includes two tests, one using a dry rubbing cloth and the other using a wet rubbing cloth.

## 2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates

indicated are applicable to this Document; for the undated documents, only the latest version

(including all the amendments) is applicable to this Document.

GB/T 251 Textiles - Tests for color fastness - Grey scale for assessing staining (GB/T 251-2008, ISO 105-A03:1993), IDT)

GB/T 6151-2016 Textiles - Tests for color fastness-General principle of testing (GB/T 6151-2016, ISO 105-A01:2010, MOD)

GB/T 6529 Textiles - Standard atmospheres for conditioning and testing (GB/T 6529-2008, ISO 139:2005, MOD)

GB/T 6682 Water for analytical laboratory use - Specification and test methods (GB/T 6682-2008, ISO 3696:1987, MOD)

GB/T 33729 Textiles - Tests for color fastness - Cotton rubbing cloth (GB/T 33729-2017, ISO 105-F09:2009, MOD)

## 3 Terms and Definitions

For the purposes of this Document, there are no terms and definitions apply.

1) ISO 105-A03:1993 has been replaced by ISO 105-A03:2019.

## 7 Specimens

### 7.1

If the textile to be tested is a fabric, prepare a specimen with a size of no less than 25 mmx25

mm. If the test accuracy is higher, the number of specimens can be increased.

### 7.2

If the textile to be tested is yarn, it shall be woven into a fabric with a specimen size of no less than 25 mm x 25 mm; or the yarn shall be wound parallel to the length direction of a

rectangular cardboard so that the yarn is evenly spread into one layer on a cardboard of suitable size.

### **7.3 Before the test, the specimen and rubbing cloth (5.2) shall be placed in the standard**

atmosphere specified in GB/T 6529 for at least 4 h for humidity conditioning. With the consultation of the relevant parties, it may also be conditioned in the optional standard atmosphere specified in GB/T 6529, which shall be stated in the test report. The specimen and rubbing cloth shall be respectively placed on a sieve or a perforated rack for humidity conditioning. For example, fabrics such as cotton or wool may require a longer humidity conditioning time.

### **7.4 In order to obtain the best test results, the test should be carried out in the standard**

atmosphere specified in GB/T 6529.

## **8.1 General**

Remove the vertical pressure rod of the tester (5.1), clamp the specimen on the bottom plate of

the tester; and place a metal mesh or water-resistant fine sandpaper (5.3) between the bottom

plate and the specimen to reduce the movement of the specimen during the friction process.

The rubbing cloth (5.2) is fixed to the friction head at the end of the vertical pressure rod. The

vertical pressure rod is reset to the operating position so that the friction area of the specimen

contacts the rubbing cloth on the friction head. The downward pressure of the vertical pressure

rod is  $(11.1 \pm 0.5)$  N.

Prepare two blocks of specimens for dry friction test and wet friction test, respectively.