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

GB/T 16991-2008

Replacing GB/T 16991-1997

**Textiles -- Test for colour fastness -- Colour fastness and ageing
to artificial light at high temperatures: Xenon arc**

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(English Translation)

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Foreword

This standard uses the redrafted law revision using ISO 105-B06.1998 "Textiles Tests for color fastness high temperature resistant artificial light fastness and anti-aging properties. Xenon arc "and ISO 105-B06 amendments 1.2002. This standard and ISO 105-B06.1998 and ISO 105-B06 repair Change a single 1. The main change is the 2002 reference standard is replaced with ISO standards corresponding to our standards.

This standard replaces GB/T 16991-1997 "textile color fastness test high-temperature light fastness. Xenon arc." This standard GB/T 16991-1997 compared to the main changes are as follows.

--- Remove the 2 reference standard GB/T 8432-1987, GB/T 730-1986, adds a reference standard GB/T 8431.

--- Principle adds color fastness and aging test instrument rating.

--- The term "blue wool standards" to "blue wool standard."

--- Equipment and materials added to the blue wool standard description of the instrument and the light source and the optical device requirements; "Irradiance Monitor Meter "to" radiometer "; increase blackboard thermometer," Black standard thermometer "to" Black Label thermometer "; increased shading paper tracings Said; remove humidity control standards; increase when using the instrument rating, a description of the instrument; increasing material. polyester non-woven fabric, and describes Said its requirements.

--- Revised exposure cards and sample preparation (with respect to the GB/T 16991-1997 of "Sample 6"); to increase its backing and requirements Description; Amendment sample loading mode, reserved GB/T 16991-1997 in Figure 2 sample loading method described herein.

--- The GB/T 16991-1997 in "5 exposure test conditions" integrated into the "operating

procedures"; and to delete the original Article 3 kinds of exposure Member, increasing five kinds of exposure conditions (conditions increased from 6 amendments 1.2002); revision of the original exposure method, an increase of one kind of exposure method.

--- Modify light fastness assessment; the corresponding rating under the new conditions of exposure and exposure method.

--- Modify the test report.

--- Increase in Appendix A, Appendix B, Appendix C and Appendix D.

The Standard Appendix A, Appendix B, Appendix C and Appendix D are normative appendix.

The standard proposed by China National Textile Council.

The standard by the China Textile Association, Institute of Standardization.

This standard was drafted. wool and linen, Shanghai Textile Research Institute of Science and Technology, Shanghai textile industry technical supervision, national textile quality system the amount of supervision and inspection center.

1 Scope

This standard specifies the method of determining the color of resistance to all types of textile artificial light instead of natural daylight as well as at the same time the role of the role of heat energy Force and methods of anti-aging ability. In five different exposure conditions (see 6.1), 4 using a D65 light source, one kind of a shorter deadline Wavelength light source. This test method is particularly taking into account the textiles affected by light and heat generated inside the vehicle.

The five different exposure conditions can provide similar but not necessarily the same test results.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 250 textile color fastness test assessing change in color like the gray card (GB/T 250-2008, ISO 105-A02.1993, IDT) GB/T 6151 Textiles Tests for color fastness test General (GB/T 6151-1997, eqv ISO 105-A01.1994) GB/T 8427 Textiles Tests for color fastness Colour fastness to artificial light. Xenon arc (GB/T 8427-2008, ISO 105-B02.1994, MOD) GB/T 8431 Textiles Tests for color fastness of the photochromic test and evaluation (GB/T

8431-1998, eqv ISO 105-B05.1993) FZ/T 01024 discoloration degree of sample instrument evaluation method (FZ/T 01024-1993, neq ISO 105-A05.1992) Principle 3

3.1 Color fastness test

The sample with the blue wool standards under specified conditions were placed under artificial light exposure, after being quantitative light energy, through Blue wool sample and standard samples or GB/T 250 specified by assessing change in color is compared with the gray sample card, or by FZ/T 01024 referred Given color detection equipment was evaluated to assess the extent of its light color.

3.2 Aging test

Specimens should be 6 blue wool standard (see GB/T 8427) together, under specified conditions, were placed under artificial light exposure. The test Like with the GB/T 250 specified assessing change in color like the gray card to rate their degree of light color, or use FZ/T 01024 stipulated the color of their light fastness test instrument to rate the degree of discoloration. Another characteristic of aging, such as physical properties, etc., can also be evaluated.

Note: The principle should be strictly in accordance with the requirements of the test, and according to GB/T 6151 test results rating.

4.1 Standard blue wool

2 may use different sets of blue wool standards, the two are not interchangeable.

4.1.1 1-8 Blue Wool Standards Blue wool standard used in Europe like digital 1-8, respectively, of the eight kinds of wool standards within the group is named. The Blue Sheep Mao standard is dyed wool Table 1 listed composition. In level 1-8, after each digit represents blue Wool color fastness standards in light color is about 2 times the previous one (see Table 1).