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CCS W 04



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

GB/T 11039.4-2014

**Textiles -- Tests for colour fastness -- Colour fastness to
contaminants -- Part 4: Oxides of nitrogen in the atmosphere at
high humidity**

纺织品 色牢度试验 耐大气污染物色牢度 第4部分：高湿氧化氮

(English Translation)

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Foreword

GB/T 11039 "Textiles Tests for color fastness color fastness of air pollutants" includes the following sections.

- Part 1. Oxide;
- Part 2. Gas smoked;
- Part 3. atmospheric ozone;
- Part 4. humidity oxide.

This section GB/T Part of 411,039.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses redrafted law revision using ISO 105-G04. 1989 "Textiles - Tests for color fastness - Part G04. Weathering Humidity oxide color fastness "(in English), and ISO 105-G04. 1989 The main differences are as follows.

- The standard name changed to be consistent with GB/T 11039 standard series format;
- Remove the foreword and introduction of international standards;
- Normative references in international standards replace the corresponding national standards, ISO 105-G. 1978 Replace of GB/T 11039.1;
- 5.2 adds specific washing procedure, washing and dry-cleaning and sample size when;
- Test report adds, "whether the sample after washing or dry cleaning process." this part is proposed by the China Textile Industry Association.

This part of the National Textile basic standards Standardization Technical Committee Technical Committee (SAC/TC209/SC1) centralized.

This section is drafted. Textile Standard (Beijing) Inspection and Certification Center Co., Ltd. Tianxiang (Tianjin) Quality Technology Services Limited.

1 Scope

This section GB/T 11039 specifies the method for the determination of colored textiles at high temperature and humidity resistance to atmospheric conditions nitrogen oxide fastness.

Test Method for low humidity conditions found in GB/T 11039.1.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

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 3921-2008 Textiles Tests for color fastness soaping color fastness (ISO 105-C10.2006, MOD) GB/T 5711 Textiles Tests for color fastness to dry cleaning fastness (GB/T 5711-1997, eqv ISO 105-D01.1993) GB/T 8424.1 Textiles tests for color fastness General principles for measurement of surface color (GB/T 8424.1-2001, eqv ISO 105-J01.1997) GB/T 11039.1 Textiles Tests for color fastness color fastness of air pollutants - Part 1. Oxide (GB/T 11039.1-2005, ISO 105-G03.1993, MOD) Principle 3 Control samples and standards at the same time exposed filled with nitric oxide gas, and the relative humidity was $87.5\% \pm 2.5\%$, temperature $40\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ Constant environment, until the control standard of the degree of discoloration faded consistent with the reference standard. The program can repeat the cycle until the sample color Reaches a predetermined degree of discoloration, or until a predetermined number of cycles.

4 Equipment and Reagents

4.1

Test positions, by an inner wall coated with a corrosion-resistant layer made of stainless steel, capable of maintaining a relative humidity of the warehouse $87.5\% \pm 2.5\%$, temperature Constant ambient $40\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$, and nitrogen dioxide contained in the volume fraction $(5 \times 10^{-6}) \pm (1 \times 10^{-6})$.

4.2

control standards (see 8.2).

4.3

Fading reference standard (see 8.2).

4.4

Evaluation of color like the gray card, in line with GB/T 250.

4.5

Oxide (see 8.3).

Warning. high concentration of nitric oxide is harmful to health, should be vented to the atmosphere, or collected in the water, and the mass fraction of 10% or sodium hydroxide solution and sodium bicarbonate solution. The highest concentration of nitric oxide work area does not exceed the volume fraction of 5×10^{-6} .

5 Sample

5.1

scissor sample size of at least 60mm x 60mm. The rating for the match, as they should be stored in a sealed container in the dark to prevent discoloration.