

ICS 17.180.20
CCS W 04

FZ

**TEXTILE INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

FZ/T 01099-2021

**Color system of textiles
(English Translation)**

Issued on: January 1, 1970

Implemented on: January 1, 1970

**Issued by: Ministry of Industry and Information Technology of the
People's Republic of China**

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and Definitions
4 Color stereo
4.1 Composition
4.2 Hue
4.3 Brightness
4.4 Chroma
5 Color code
5.1 Label format
5.2 Standard value
5.3 Labeling method
6 Measurement and color difference evaluation
6.1 Basic conditions
6.2 Measurement
6.3 Color difference evaluation
7 Color Analysis and Matching
Appendix A (normative) Color data values corresponding to the labels of the textile color system part
Appendix B (Informative) Color Analysis and Comparative Example

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" drafted.

This document replaces FZ/T 01099-2008 "Textile Color System". Compared with FZ/T 01099-2008, the main technical changes are as follows.

--- Modified the type of color data value (see 5.2, 4.3 of the 2008 edition), and adjusted the color data of Appendix A (see Table A.1);

--- Improved the color difference evaluation method (see 6.3, 4.4.2 of the 2008 edition);

- Expanded the content of the color sample book (see 5.3);
- Supplement the requirements for visual inspection methods (see 6.2.2);
- Increased the application of color analysis and matching (see Chapter 7, Appendix B).

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the requirements for three-dimensional color labeling, measurement, and color difference evaluation for textile colors, and provides suggestions for color analysis and matching.

This document is applicable to the quantitative representation, analysis and matching application of color in the fields of textile design, processing and use.

Quantitative representation and analysis and matching applications of color can also be used for reference.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 3978 Standard Illuminator and Geometric Conditions GB/T 3979 Measurement method of object color GB/T 5698 Color Terms GB/T 5702 Evaluation Method for Color Rendering of Light Sources GB/T 6529 Standard atmosphere for textile humidity conditioning and testing GB/T 7771 Determination of Special Metamerism Index Altered Illuminators GB/T 8424.3 Calculation of color difference in color fastness test of textiles (ISO 105-J03) ISO 23603:2005(CIES012/E.2004) Standard for quality assessment of daylight simulator light sources for visual identification and measurement of color measurement of colour) the terms and definitions defined in GB/T 5698 and the following apply to this document.

According to the characteristics of the textile industry and human visual characteristics, the specified hue, lightness and chroma are used to express the color sequence system of colors.

color solid

Take the bottom-up vertical axis as the lightness axis from black to white, take the vertical line segment starting from the middle vertical axis as the chroma distance, and take the distance around the middle vertical axis as the lightness axis.

The top-view corner is the hue corner, which is a three-dimensional space of surface color composed of hue, lightness, and chroma.

Hue

It represents the visual perception characteristics of red, yellow, green, blue, purple and other colors, one of the three attributes of color.

[Source. GB/T 5698-2001, 5.7, with modifications]