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

FZ/T 54005-2020

**Spun-dyed polyester(PET) drawn textured yarns
(English Translation)**

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Foreword

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

This standard replaces FZ/T 54005-2010 "Colored Polyester Low Stretch Yarn". Compared with FZ/T 54005-2010, the main changes are as follows.

---The scope of application is expanded to include a bus density of 30dtex~700dtex and a monofilament line density of 0.5dtex~5.6dtex (see Chapter 1, Chapter 1 of the 2010 edition);

---The normative references add GB/T 4146 (all parts) "Textile Chemical Fiber", FZ/T 50002 "Chemical Fiber Test Method for Shape, GB/T 37632, Test Method for Titanium Dioxide Content of Chemical Fibers (see Chapter 2, Chapter 2, 2010 Edition Chapter 2);

---Add reference to terms and definitions GB/T 4146 (all parts); delete other terms listed separately (see Chapter 3, 2010 Chapter 3 of the Year Edition);

---Related content of color system and code name is deleted from product identification (see 4.2, 4.2 in 2010 edition);

---The product grading has been revised to three levels of superior product, first-class product and qualified product (see 5.1, 5.1 of the 2010 edition);

File assessment, and adjusted the corresponding indicators (see 5.2, 5.2 in the 2010 edition);

---In the performance items and indicators, the breaking strength of circular cross-section products is divided into two categories according to the bus density of 400dtex (see 5.2, 5.2 of the 2010 edition);

---In the performance items and indicators, the curl shrinkage rate is divided into two types of assessments according to the central value of 10% (see 5.2, the 2010 edition of 5.2);

---Increase the cross-sectional shape and irregularity and the content of titanium dioxide in the technical requirements (see 5.4, 5.5);

---In the test method, increase the cross-sectional shape and degree of irregularity and the test method of titanium dioxide content (see 6.11, 6.12).

This standard was proposed by the China National Textile and Apparel Council.

This standard is under the jurisdiction of the China National Textile and Apparel Council.

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Company, Zhejiang Haili Environmental Protection Technology Co., Ltd., Xinfengming Group Co., Ltd., Shanghai Textile Industry Technology Supervision Institute, Sinochem Learn Fiber Industry Association.

1 Scope

This standard specifies the terms and definitions, product identification, technical requirements, test methods, inspection rules and signs, and packaging for colored polyester low-stretch yarns.

Requirements for loading, transportation and storage.

This standard is applicable to bus density of 30dtex~700dtex, monofilament line density of 0.5dtex~5.6dtex, triangular cross section, three-leaf section it is a colored polyester low-stretch yarn produced by the use of the dope coloring technology with glossy and semi-dull surface and circular cross-section. Other colored polyester low stretch yarn can refer to use.

2 Normative references

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

GB/T 250 Gray Scale for Textile Color Fastness Test Evaluation GB/T 2828.1-2012 Sampling inspection procedures by attributes Part 1: Batch inspection sampling searched by acceptance quality limit (AQL) plan GB/T 3291.1 Terminology for performance and test of textile materials Part 1: Fiber and yarn GB/T 3291.3 Terminology for performance and testing of textile materials-Part 3: General GB/T 3921-2008 Textile color fastness test color fastness to soaping GB/T 4146 (all parts) Textile chemical fiber GB/T 6502 Sampling method for chemical fiber filament GB/T 6504 Chemical fiber oil content test method GB/T

6505 Test method for thermal shrinkage of chemical fiber filament (after treatment) GB/T 6506 Test method for crimping properties of synthetic fiber textured yarn GB/T 6508 Test method for dyeing uniformity of polyester filament GB/T 8170-2008 Numerical rounding rules and the expression and determination of limit values GB/T 14343 Test method for linear density of chemical fiber filament GB/T 14344 Test method for tensile properties of chemical fiber filament GB/T 37632 Chemical fiber titanium dioxide content test method FZ/T 50001-2016 Synthetic fiber filament network test method FZ/T 50002 Chemical fiber profile test method

3 Terms and definitions

The terms and definitions defined in GB/T 3291.1, GB/T 3291.3, and GB/T 4146 (all parts) apply to this document.

4 Product identification

4.1

Product specifications are expressed in terms of bus density (dtex) and number of filaments (f). For example, the bus density is 120dtex, and the number of filaments is 144