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

FZ/T 12040-2020

Replacing FZ/T 12040-2013

**Polyester (nylon) filament/spandex overlapping yarn
(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 12040-2013 "Polyester (Nylon)/Spandex Covered Silk Thread". Compared with FZ/T 12040-2013, the main technology the technical changes are as follows.

---The standard name is adjusted to "polyester (nylon) filament/spandex covered yarn";

---Adjusted the standard scope, terms and definitions;

---The grading regulations increase the grade of qualified products;

---Polyester (nylon) filament/spandex twisted covered yarn has increased the assessment items of "dyeing uniformity, stiff yarn, missing (broken) spandex", and improved the break the index of variation coefficient of crack strength has been adjusted, the index of elongation at break has been adjusted, the index of "joint, tight line" has been deleted, and the "twist deviation rate" has been adjusted Change "twist" and "loose loop" to "loop wire" (see Table 1, Table 3, Table 1 and Table 2 of the 2013 edition);

---Polyester (nylon) filament/spandex air-covered yarn has increased the assessment items of "dyeing uniformity, stiffness, lack (broken) of spandex", and improved the break the evaluation requirements for the coefficient of variation of the breaking strength and the coefficient of variation of the elongation at break, the "joint" index is deleted, and the "network point" is changed to "network point".

"Degree" and "loose ring" are changed to "loop wire" (see Table 2 and Table 3, Table 1 and Table 2 of the 2013 edition);

---Inspection rules added "inspection type" and "inspection item", and stipulated the type inspection of polyester (nylon) filament/spandex covered yarn and factory inspection index items (see 7.1, 7.2).

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

This standard is under the jurisdiction of the Cotton Textile Subcommittee of the National Textile Standardization Technical Committee (SAC/TC209/SC10).

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Textile Industry Technical Supervision Office.

1 Scope

This standard specifies the terms and definitions, product classification, marking, requirements, test methods, and inspection regulations for polyester (nylon) filament/spandex covered yarn Rules, signs, packaging, transportation and storage.

This standard applies to covered yarns made of natural polyester (nylon) filaments and spandex as raw materials and combined through processing. Colored polyester (nylon) filament and spandex covered yarn can be used as reference.

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 document.

For undated references, the latest version is applicable to this document.

GB/T 2543.1 Determination of yarn twist in textiles Part 1: Direct counting method GB/T 3291.1 Terminology for performance and testing of textile materials-Part 1: Fibers and yarns GB/T 3291.3 Terminology for performance and testing of textile materials-Part 3: General GB/T 4146 (all parts) Textile terms (chemical fiber part) GB/T 6502 Sampling method for chemical fiber filament GB/T 6508 Test Method for Dyeing Uniformity of Polyester Filament GB/T 8693 Labeling of textile yarn 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 29862 Labeling of textile fiber content FZ/T 01095 Test method for fiber content of textile spandex products FZ/T 50001-2016 Synthetic fiber filament network test method FZ/T 50008 Nylon filament dyeing uniformity test method

3 Terms and definitions

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

Polyester (polyamide) filament/spandexcoretwistedyarn Covered yarn made of spandex and polyester (nylon) filaments combined and twisted.

Polyester (polyamide) filament/spandexaircovered yarn Under the action of compressed air, spandex and polyester (nylon) filaments form a covered yarn that is entangled with each other and presents a consolidation point.

4.1 Product Classification

According to different processing methods, polyester (nylon) filament/spandex covered yarn is divided into twisted covered yarn and air covered yarn.