

ICS 59.060.20
CCS W 52

FZ

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

FZ/T 54011-2014

**Continuous spinning of viscose filament yarns
(English Translation)**

Issued on: July 9, 2014

Implemented on: November 1, 2014

Issued by: Ministry of Industry and Information Technology of PRC

Table of Contents

Foreword...	3
1 Scope...	5
2 Normative references...	5
3 Terms and definitions...	6
4 Classification and identification...	6
5 Technical requirements...	6
6 Test method...	7
7 Inspection rules...	10
8 Marking, packaging, transportation and storage...	12
Appendix A (Normative) Appearance requirements, inspection, acceptance .	14

1 Scope

This standard specifies the classification and labeling, technical requirements, test methods, inspection rules and labeling, packaging, transportation, storage requirements of continuous spinning of viscous filament yarn.

This standard applies to natural color viscous filament yarn which is produced by the raw materials of cotton pulp, wood pulp or mixture of cotton pulp and wood pulp, using the continuous spinning process, which has a linear density range of 55.0 dtex ~ 335.0 dtex and the monofilament linear density of 2.0 dtex

~ 7.0 dtex. Other continuous spinning of viscous filament yarns can use it as a reference.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB/T 2828.1-2012 Sampling procedures for inspection by attributes - Part 1:

Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

GB/T 3291.1 Textiles - Terms of textile material properties and test - Part 1:

Fiber and yarn

GB/T 3291.3 Textiles - Terms of textile material properties and test - Part 3:

General

GB/T 4146 Textile terms and terminology (parts of chemical fibers)

GB/T 4146.1 Textiles - Man-made fibers - Part 1: Generic names

GB/T 4146.3 Textiles - Man-made fibers - Part 3: Terms of inspection

GB/T 6502 Sampling method of man-made filament yarns

GB/T 6503 Testing method for moisture regain of man-made fibers

GB/T 6504 Testing method for oil content of man-made fibers

GB/T 6505 Testing method for thermal shrinkage of man-made filament yarns

GB/T 6529 Textiles - Standard atmospheres for conditioning and testing

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

GB/T 14343 Testing method for linear density of man-made filament yarns

GB/T 14344 Testing method for tensile of man-made filament yarns

FZ/T 50014 Method for the determination of residual sulfur in viscose fibers- direct iodimetry

FZ/T 50015 Test and assessment for dyeing uniformity of viscose filament yarn

3 Terms and definitions

The terms and definitions as defined in GB/T 3291.1, GB/T 3291.3, GB/T 4146, GB/T 4146.1, GB/T 4146.3 apply to this document.

4.1 According to the different matting agents during production, continuous

spinning of viscose filament yarn products are divided into shiny yarn and matting yarn.

4.2 Product specifications are expressed by linear density (dtex) and the number of monofilaments (f).

Example: For a filament with a linear density of 133.3 dtex and a monofilament number of 30f, the specification is expressed as 133.3 dtex/30 f.

4.3 Product identification shall be based on product specifications, raw material pulp used in production, gloss, production process.

Example: 133.3 dtex/30 f cotton pulp (bright) continuous spinning of viscose filament yarn.

6.1.2.1 When the moisture regain of the specimen exceeds the predetermined

moisture regain, pre-conditioning is required. The pre-conditioning conditions are as follows:

- The temperature is less than or equal to 50 °C;
- Humidity 5% ~ 25%;
- The time is greater than 30 min.

6.1.2.2 The standard atmosphere for humidity conditioning and test of

laboratory samples shall be in accordance with GB/T 6529.

6.1.2.3 Random inspection of the manufacturer can refer to Appendix B for quick humidity conditioning.

6.2 Linear density

Take the specified length of sample according to GB/T 14343. Perform de-sizing (washing), rinsing and drying according to the method B of GB/T 6504 before testing; then test the linear density according to GB/T 14343.

6.3 Breaking strength and elongation at break

It is performed according to the provisions of GB/T 14344.

6.4 Number of monofilaments

It is performed according to the provisions of GB/T 14343.

6.5 Residual sulfur

It is performed according to the provisions of FZ/T 50014. Among them, take the laboratory samples according to the provisions of GB/T 6502. After removing tens of meters from the surface of the laboratory samples, cut the filament yarns into pieces of about 2 cm. Mix them evenly. Put it into a ground-mouth bottle to keep moisture and save for testing purpose.

6.6 Dyeing uniformity

It is performed according to the provisions of FZ/T 50015.

Among them, the evaluation rules for blue pattern stripes, bands, patterns and light pattern stripes, bands and patterns are as follows:

- a) The samples with blue pattern stripes, bands and patterns are regarded as qualified products;

b) The samples with light pattern stripes, bands and patterns are regarded

R - Measured moisture regain rate, %;

A - The deviation rate of the average net mass of the package and the official mass, %.

7.1 Inspection type

The inspection types are divided into type inspection and exit-factory inspection.

Type inspection shall be carried out in the following cases:

- a) During the specified periodic inspection;
- b) When there are changes in production design, process, and raw materials that may affect product quality;
- c) When the results of the exit-factory inspection are significantly different from the previous type inspection;
- d) When the national inspection agency requires type inspection.

7.2 Inspection items

7.2.1

All items in Table 1 are type inspection items, wherein serial numbers 1 to

8 are exit-factory inspection items; the tests shall be carried out according to the corresponding test methods as specified in Chapter 6.

7.2.2

The visual inspection items shall be inspected according to the requirements of 5.4 and the test methods specified in this standard.

7.2.3

The mass difference shall comply with the requirements of 5.5 and shall be implemented in accordance with the provisions of this standard.

7.3 Group-batching rules

Use periodic sampling to form an inspection lot within a certain range. A production batch can consist of one inspection lot or several inspection lots.

7.4 Sampling requirements

7.4.1

In the performance items, the dyeing uniformity is fully inspected, whilst the other items are sampling inspection. Laboratory samples shall be taken according to the provisions of GB/T