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**FZ**

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

**FZ/T 42009-2019**

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**Mulberry native silk  
(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 42009-2006 "Silkworm Silk". Compared with FZ/T 42009-2006, the main technical changes are as follows.

- Modified the scope of application, stipulated that it is suitable for silkworm silk of 40den (44.4dtex) and above
- Added 5 normative references such as GB/T 250, GB/T 6529, GB/T 9994, FZ/T 40008, FZ/T 40010 (See 2);
- Modified the definition of silkworm silk (see 3.1, 3.1 in the 2006 edition);
- Deleted the technical specifications of silkworm silk in specifications below 40den (44.4dtex) in Table 1 (see 5.2, 5.2 in 2006 edition)
- Modify the defects of "color irregularity", "clip flower", "color circle", "corner hard rubber", "shrink silk", "flat wire", "double wire" and "heavy wire" in the Ming Dynasty, the "sticky strip" defect was deleted, the "fineness mixed" defect was added, and the "color irregularity" "clip" and "color circle" appearance defects were added Use GB/T 250 for quantitative evaluation requirements (see 5.3, 5.3 of the 2006 edition);
- The title of "sample silk" is changed to "sample", the title of "inspection certificate" is revised to "test report", and the title of "extra fineness" is revised to "fineness" "The specifications do not match", and the "report inspection specifications" were changed to "soil specifications" (see 6, 7, 8.4.3, 2006 editions 5.6, 6, 7, 9.4.3);
- Deleted the equipment requirements for small scales (see 7.1.1 in 2006);
- Listed separately the "tare weight" and "gross weight" inspection procedures (see 7.1.2.1, 7.1.2.2, 7.1.2.1 of the 2006 edition);

--- Removed the requirement that "the measured moisture regain rate of soil silk exceeds 14% or is less than 8%, it should be returned to the client to reorganize the balance" (see 2006 version of 7.1.2.4);

--- Listed the "stranded wire" and "cylinder wire" appearance inspection rules separately, revised the oil pollution and insect damage silk treatment regulations, and added other inspection items Rules for the treatment of visual defects (see 7.2.1.2, 7.2.1.2 in the 2006 edition);

--- Increased the tolerance requirements for the speed of the cutting machine, fineness machine, and blackboard machine (see 7.2.2.1, 7.2.3.1, 7.2.4.1, 2006 version 7.2.2.1, 7.2.3.1, 7.2.4.1);

--- Modified the calculation formula of average fineness, deviation, average common fineness [see 7.2.3.3 formula (3), formula (4), formula (5), 2006 Annual version of 7.2.3.3 (3), (4), (5)];

--- The standard material for defect inspection is clarified as "Standard Photo of Raw Silk Cleaning Inspection Standard", and the requirements of the inspection room have been revised 2006 version 7.2.4.1);

--- Removed the provisions of the number of lines of the blackboard wire arrangement with nominal denier below 40den (44.4dtex) in Table 7 (see 7.2.4.2, 2006 Version 7.2.4.2);

--- Modified the bag packaging requirements, carton printing requirements and packaging logo requirements, and the large and small pineapple shapes in the cartridge form were modified to be tapered.

Removed the requirements for trademarks (see 8.1.4, 8.2, 8.4.2, 2006 versions 9.1.4, 9.2, 9.4.2);

--- Added Appendix A (informative appendix) soil silk production process.

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

This standard is under the jurisdiction of the National Silk Standardization Technical Committee (SAC/TC401).

## 1 Scope

This standard specifies the terms and definitions, marking, requirements, inspection rules, inspection methods, packaging and marking of silkworm silk.

This standard applies to silkworm silk of 40den (44.4dtex) and above specifications.

## 2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article. For the cited documents without date, the latest version (including all amendments) applies to this document.

GB/T 250 Gray sample card for textile color fastness test to evaluate discoloration  
GB/T 6529 Standard atmosphere for humidity control and testing of textiles  
GB/T 8170 Numerical Rounding Rules and Representation and Judgment of Limit Values  
GB/T 9994 The official moisture regain rate of textile materials  
GB/T 9995 Determination of moisture content and moisture regain of textile materials  
Oven drying method  
FZ/T 40008 Technical requirements for darkroom for silk blackboard inspection  
FZ/T 40010 Technical Specification for Silk Appearance Inspection Facilities

## 3 Terms and definitions

The following terms and definitions apply to this document.

Cocoon or secondary cocoon of silkworm as raw material, according to a certain process requirements, with a special style of coarse filament yarn reeling.

**Note:** See Appendix A for the silkworm silk production process.

## 4 Mark

The silkworm silk specifications are marked with "lower limit of fineness/upper limit of fineness", and the center value of fineness is the nominal fineness.

Example 1.

50/70den (55.6/77.8dtex). The nominal fineness of silkworm silk is 60den (66.7dtex), and the lower limit of fineness of silkworm silk is 50den (55.6dtex), the upper limit of fineness is 70den (77.8dtex).

Example 2.

100/120den (111.1/133.3dtex). the nominal fineness of silkworm silk is 110den (122.2dtex), the lower limit of fineness of silkworm silk is 100den (111.1dtex), the upper limit of fineness is 120den (133.3dtex).

### 5.1 Classification

The grade of silkworm silk is divided into double special grade, special grade and one according to the comprehensive judgment of the quality technical index and appearance quality of tested silkworm silk