

ICS 59.060.20
CCS W 52

FZ

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

FZ/T 50009.3-2007

Replacing FZ/T 50009.3-1998

**Testing method for crimping performance of hollow polyester
staple fibres**

中空涤纶短纤维卷曲性能试验方法

(English Translation)

Issued on: November 14, 2007

Implemented on: May 1, 2008

**Issued by: National Development and Reform Commission of the
People's Republic of China**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 4 Device
- 5 Laboratory samples and specimens
 - 5.1 Sampling
 - 5.2 Test conditions

Foreword

The standard pre-tension parameters and Appendix C to modify using BISFA "polyester staple fiber test method" (1998 edition) standard, the standard Although the prospective method will be described for several other curly, curly degrees outside, but the content of parameters and statistics involved are equally applicable to the present standard.

Instead of the standard FZ/T 50009.3-1998 "three-dimensional crimped polyester staple fiber curl performance test method." this standard FZ/T 50009.3-1998 The main technical content differences are as follows.

- Normative references removed GB/T 14464 "polyester staple fiber";
- Increase the extraction and testing to determine the number of spare parts laboratory sample;
- Increasing the humidity-time laboratory sample and fast method for the humidity;
- Modify the relative humidity and the humidity test with the standard atmosphere;
- Increasing the counting method two-dimensional crimp hollow polyester fiber number;
- Increased pre-tension method for calculating;
- Increasing the sample to determine the amount of time required to calculate the bulk sample as well as the coefficient of variation coefficient of variation do not meet requirements how to increase Number of trials.

Appendix C of this standard is a normative appendix, Appendix A, Appendix B is an informative annex.

The standard proposed by China Textile Industry Association.

This standard by the Shanghai textile industry technical supervision of the centralized.

This standard was drafted. China Sinopec Yizheng Chemical Fibre Company Limited.

1 Scope

This standard specifies the test method for crimp hollow polyester staple fiber properties.

This standard applies to test hollow polyester staple fiber curl properties.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 6529 textiles conditioning and testing - Standard atmospheres GB/T 8170 numerical rounding rules GB/T 14334 chemical fiber staple sampling method Principle 3 in the predetermined load, the force within a certain time, measured changes in length of the fibers, to determine the number of crimps of the fibers, crimp ratio, crimp back Repetition rate and crimp modulus of elasticity and other properties.

4 Device

4.1

crimp elastic Technical Requirement.

a) scale range 5mN balance, its minimum scale value 0.01mN; scale range of 10mN balance, the minimum scale Value 0.2mN;

b) does not exceed the length of the error holding 0.2mm.

4.2

cashmere plate. a contrasting color and fiber.

4.3

tweezers, ruler, etc.

5.1 Sampling

5.1.1

laboratory sample parts demand removed.

5.1.2

bulk sample in laboratory samples taken according to GB/T 14334 regulations.

5.1.3

Do not extract moisture accident in transit, packaging has been opened or damaged packages.

5.2.1 Standard conditioning and testing atmosphere

The humidity 5.2.1.1 laboratory sample using a standard atmosphere according to GB 6529 standard temperate atmosphere in testing three standards, temperature $(20 \pm 2) ^\circ\text{C}$, relative humidity $(65 \pm 5)\%$; at least the humidity 16h, can also be specified in Appendix A fast the humidity.

Standard 5.2.1.2 Test laboratory sample tests in the atmosphere according to GB 6529 standard provisions temperate atmosphere with three standard temperature $(20 \pm 2) ^\circ\text{C}$, relative humidity test at $(65 \pm 5)\%$ of the environment.

5.2.2 Preset gripping distance

Preset clamping distance of 20mm, the nominal length of the fiber is small can be adjusted to 10mm.

5.2.3 Pre-tension

Sample pre-tension according to equation (1).