

ICS 61.202
CCS Y 76

FZ

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

FZ/T 81021-2014

**Woven Swimming Wear
(English Translation)**

Issued on: October 14, 2014

Implemented on: April 1, 2015

**Issued by: Ministry of Industry and Information Technology of the
People's Republic of China**

Table of Contents

Foreword...	3
1 Scope...	4
2 Normative References...	4
3 Terms and Definitions...	5
4 Requirements...	5
5 Test Methods...	13
6 Inspection Classification Rules...	17
7 Marking, Packaging, Transportation and Storage...	22

1 Scope

This Standard specifies all the technical characteristics of woven swimming wear, such as requirements, test methods, inspection classification rules, and marking, packaging, transportation and storage, etc.

This Standard is applicable to swimming wear and cap (primary fabric. textile woven fabric).

This Standard is not applicable to swimming wear or cap for infants (age $\leq$ 36 months).

2 Normative References

The following documents are indispensable to the application of this Standard. In terms of references with a specified date, only versions with a specified date are applicable to this Standard. The latest version (including all the modifications) of references without a specified date is also applicable to this Standard.

GB/T 250 Textiles - Tests for Color Fastness - Grey Scale for Assessing Change in Color

GB/T 251 Textiles - Tests for Color Fastness - Grey Scale for Assessing Staining

GB/T 3921-2008 Textiles - Tests for Color Fastness - Color Fastness to Washing with Soap or Soap and Soda

GB/T 4841.3 Color Cards of Standard Depths for Dyeing with Dyestuffs 2/1, 1/3, 1/6, 1/12, 1/25

GB 5296.4 Instructions for Use of Products of Consumer Interest - Part 4. Textiles and Apparel

GB/T 5714 Textiles - Tests for Color Fastness - Color Fastness to Sea Water

GB/T 8170 Rules of Rounding off for Numerical Values & Expression and Judgment of Limiting Values

GB/T 8433-2013 Textiles - Tests for Color Fastness - Color Fastness to Chlorinated Water (Swimming-pool Water)

GB/T 8629-2001 Textiles - Domestic Washing and Drying Procedures for Textile Testing

4.2.2 One-piece swimsuit shall indicate the suitable net height, net chest circumference or net waist circumference (unit. cm).

Example. 170/95.

4.2.3 Split swimsuit shall indicate the suitable net height, net chest circumference or net waist circumference (unit. cm). The tops of split swimsuit (with brassiere) shall comply with stipulations in FZ/T 81020.

Example. A75.

4.2.4 Swimming pants shall indicate the suitable net height and net waist circumference (unit. cm).

Example. 180/100.

4.2.5 The specification of swimming cap shall comply with stipulations in FZ/T 80010.

4.3.1 Fabric

Fabrics that can comply with the quality requirements of this Standard shall be selected in accordance with relevant national-level standards on fabric.

4.3.2 Lining

Linings that are suitable for all the fabrics and can comply with the quality requirements of this Standard shall be adopted.

4.3.3 Accessories and Strings

Buttons, zippers and other accessories that are suitable for all the fabrics shall be adopted; the surface of buttons shall be clean, smooth and impeccable. Accessories shall have no defects, sharp points or edges; accessories shall not be deformed, discolored, stained or rusty after being washed. Zippers shall be smooth and have satisfying meshes. Strings that can comply with the quality requirements of this

Standard shall be adopted in accordance with relevant national-level standards on textile

products.

4.4 Color Difference

Color difference on the surface, and between the tops and bottoms of split swimsuit shall be $\geq$ Level-4; color difference of linings shall be $\geq$ Level 3-4 (excluding special design).

4.5 Appearance Defects

The allowable existence of defects on each part of finished products shall comply with than 1/12 standard dyeing darkness shall be considered as light colors.

4.9.3 Only products with spliced dark and light colors shall be considered in washing splicing and inter-staining. Color fastness to light shall not be assessed in fluorescent color.

4.9.4 The assessment index of qualified products with color fastness to wet friction

resistance (dark fabric) is allowed to be half a level lower than this Standard.

4.9.5 Elastic fabric shall not be assessed in dimensional stability to washing, seaming performance and breaking strength; seaming performance shall not be assessed in the external decorative part.

4.9.6 Elastic elongation and tensile elastic recovery rate to chlorinated water

(swimming pool water) shall only be assessed in fabric and lining that contains spandex fiber. Tensile elastic recovery rate to chlorinated water (swimming pool water) shall not be assessed in split woven swimsuit. When the content of elastic fiber in fabric or lining is $< 8\%$, tensile elastic recovery rate to chlorinated water (swimming pool water) shall not be assessed. Tensile elastic recovery rate to chlorinated water (swimming pool water) shall only be assessed in elastic direction.

5.1 Test Instruments

5.1.1

Steel tap or ruler (division value. 1 mm).

5.1.2

Grey scale for assessing change in color (tests for color fastness) (GB/T 250).

5.1.3

Grey scale for assessing staining (tests for color fastness) (GB/T 251).

5.1.4

Color cards of standard depths for dyeing with dyestuffs 1/12 (GB/T 4841.3).

5.2 Specification Measurement of Finished Products

5.2.1

Specification of main parts of finished products shall comply with stipulation 4.2.

5.2.2

Allowable deviation of specification and dimension of finished products shall comply with stipulation 4.7; methods of measuring the main parts shall comply with stipulations in Table 6 and Figure 2 below.

Table 6 Unit. cm

No. Part Measurement Stipulations

1 Length

Measure from the highest part of front shoulder strap to the bottom edge; strap-connected.
measure from the highest part of front body to the bottom edge.

2 Chest Horizontally measure the widest part of chest (calculated by

finished products, the sample card in GB/T 250 shall be adopted for comparison.

5.4 Physical and Chemical Performance Measurement

5.4.1

Dimensional stability to washing shall be determined in accordance with stipulations in GB/T 8630; washing methods shall comply with Procedure 5A in GB/T

8629-2001. Hanging-to-dry shall be adopted as the mode of drying; 3 pieces of finished products shall be randomly taken from the batch for tests; the average value of the 3 pieces shall be taken as the final result.

5.4.2

Color fastness to soaping of finished products shall be determined in accordance with method A (1) in GB/T 3921-2008.

5.4.3

Color fastness to chlorinated water (swimming pool water) shall be determined in accordance with stipulations in GB/T 8433-2013; effective chlorine concentration.

50 mg/L.