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PEOPLE'S REPUBLIC OF CHINA**

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Derlin zipper
(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 is a revision of QB/T 2172-2001, Derlin zipper. Compared with QB/T 2172-2001, the main changes in this Standard are as follows.

- Change the scope of application of zippers;
- Add terms and definitions for zippers;
- Add the recommended applications for zipper models (see Appendix A);
- Add types of one way open-end zippers;
- Change the No. 9 zipper in the previous standard to No. 10 in this Standard;
- Change the dimensional ranges of the tape width and back and forth head tape lengths of derlin zippers;
- Add requirements for the packaging quantity of finished zippers and sliders;
- Change the requirements for the number of joints in chain zipper;
- Change the physical performance requirements, including holding strength of top stop, O/E chain crosswise strength, box slippage strength, slider puller

pull-off strength, slider mouth deflection strength, holding strength of slider lock, and durability of zipper;

-- Add physical performance requirements and test methods for O/E single-sided upper stop strength and pin slippage strength;

-- Change the requirements for zipper straightness and flatness;

-- Change the color difference requirements for zipper tape, and add requirements for color difference between the product and the color card (color sample) and between previous and subsequent batches;

-- Add requirements for color difference of sliders and scoops, respectively, with the color card (color sample), between previous and subsequent batches, and within the same batch;

-- Change the requirements for color fastness of zipper tape;

-- Add requirements and test methods for appearance changes of zippers after washing and drying;

-- Add safety requirements for zippers;

Derlin zipper

1 Scope

This Standard specifies the terms and definitions, classification, requirements, test conditions, test methods, inspection rules, as well as marking, packaging, transportation, storage and usage criteria of derlin zippers.

This Standard applies to derlin zippers (hereinafter referred to as zippers), and does not apply to special zippers.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the dated version applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 250-2008, Textiles - Tests for colour fastness - Grey scale for assessing

change in colour

GB/T 251-2008, Textiles - Tests for colour fastness - Grey scale for assessing staining

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 2829-2002, Sampling procedures and tables for periodic inspection by attributes (Apply to inspection of process stability)

GB/T 3920-2008, Textiles - Tests for colour fastness - Colour fastness to rubbing

GB/T 3921-2008, Textiles - Tests for colour fastness - Colour fastness to washing with soap or soap and soda

GB/T 8629-2001, Textiles - Domestic washing and drying procedures for textile testing

GB/T 8630-2002, Textiles - Determination of dimensional change in washing and drying

GB 18401, National general safety technical code for textile products

GB/T 18746, Zipper terminology

3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T 18746 apply.

4.1 According to the type, zippers are classified into finished zippers and chain zippers.

Finished zippers can be classified into open-end zippers and close-end zippers; open-end zippers are further classified into one way open-end zippers and two way open-end zippers; one way open-end zippers are further classified into ordinary one way open-end zippers and ring-type one way open-end zippers; close-end zippers can be classified into one way close-end zippers and two way close-end zippers; two way close-end zippers can be classified into "O"-type close-end zippers and "X"-type close-end zippers. Chain zipper refers to long zipper chain. See Figure 1 as an example.

5.3.1 The complete zipper shall have all components complete, and scoops arranged

neatly. There shall be no missing teeth or defective teeth.

5.3.2 The bottom stop of close-end zippers shall have no obvious skew. During opening

and closing, the slider shall not be stuck at the top stop or bottom stop. The top stop and bottom stop shall have no burrs or sharp edges.

5.3.3 Open-end zippers (including two way open-end zippers) shall be flexible in insertion and removal. The reinforcing tape and fabric tape shall be firmly and neatly bonded. The top stop, box retainer and pin separable shall have no burrs or sharp edges.

5.3.4 The surface of the decorative layer of the slider shall have uniform color, and shall

be smooth and flat without bubbles, peeling or flaking. The cavity shall be smooth and flat without burrs. When the slider is pulled, the puller shall turn flexibly, and the trademarks, characters and patterns on the bottom surface of the head of slider or on the puller shall be clear. The slider shall move smoothly when pulled, without jamming or tooth bursting.

5.3.5 The straightness of zipper shall comply with the provisions of Table 4.

Table 4 - Straightness of zipper

5.3.6 The flatness of zipper shall comply with the provisions of Table 5.

Table 5 - Flatness of zipper

5.3.7 The color difference shall comply with the following requirements.

a) The color difference between tape and color card (color sample) shall reach Grade 3 ~ Grade 4 specified in GB/T 250-2008. The color difference of tapes within the same batch shall reach Grade 4 specified in GB/T 250-2008. The color difference between tapes from previous and subsequent batches shall reach Grade 3 ~ Grade 4 specified in GB/T 250-2008.