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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5324-2024

Cotton and polyester blended grey yarn

棉与涤纶混纺本色纱线

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Product classification and labeling

Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting: This document replaces GB/T 5324-2009 "Combed polyester-cotton blended grey yarn": Compared with GB/T 5324-2009, except for the structural adjustment In addition to editorial changes, the main technical changes are as follows:

- Changed the scope of application (see Chapter 1, Chapter 1 of the:2009 edition);
- Changed product classification and labeling (see Chapter 4, Chapter 3 of the:2009 edition);
- Changed the classification provisions (see 5:1, 4:5 of the:2009 edition);
- Changed the nominal linear density division (see 5:2, Chapter 4 of the:2009 edition);
- Deleted the blackboard strip uniformity and blackboard cotton nep number assessment items (see 4:1 to 4:4 of the:2009 edition);
- Added technical requirements for carded cotton and polyester blended natural yarn (see 5:2:1);
- Added the assessment items of kilometer neps (200%), twist variation coefficient and hairiness number of combed cotton and polyester blended natural yarn (see 5:2:1);
- Changed the single yarn breaking strength, single yarn breaking strength variation coefficient, and yarn unevenness variation coefficient of combed cotton and polyester blended natural yarn Assessment indicators for yarn defects in tens and hundreds of thousands of meters (see 5:2:2, 4:1~4:4 of the:2009 edition);
- Added test methods for kilometer neps (200%), twist coefficient of variation and hairiness number (see 6:3, 6:5 and 6:6);
- Deleted the test conditions, test cycle and sample requirements, yarn package net weight test, and test results table in the test method (see 5:1, 5:2, 5:3, 5:10, 5:11 of the:2009 edition);

--- Added the test method for hairiness index H value (see Appendix B);

--- Deleted the provisions on strength correction factor value (see Appendix C of the:2009 edition): Please note that some of the contents of this document may involve patents: The issuing organization of this document does not assume the responsibility for identifying patents: This document was proposed by the China National Textile and Apparel Council: This document is under the jurisdiction of the National Technical Committee on Standardization of Textiles (SAC/TC209): This document was drafted by: Nantong Shuanghong Textile Co., Ltd., Shanghai Textile Industry Technical Supervision Institute, Weiqiao Textile Co., Ltd., Shan Donglianrun New Material Technology Co., Ltd., Fujian Jinyuan Textile Co., Ltd., Fujian Lihuazhifang Technology Co., Ltd., Zhejiang Huafu Color Spinning Co., Ltd.: Co., Ltd., China Cotton Textile Industry Association, Shihezi Fiber Inspection Institute, Changji Hui Autonomous Prefecture Fiber Inspection Institute, Western Agricultural Sciences Institute of the Chinese Academy of Agricultural Sciences Industry Research Center, Wuzhong Deyue Textile Technology Co., Ltd., Hangzhou Xiaoshan Linfen Textile Co., Ltd., Shandong Hengfeng New Yarn and Fabric Innovation Center Co., Ltd., Modern Textile Technology Innovation Center (Jianhu Laboratory), Xingtai Hengjin Textile Co., Ltd., Jihua 3542 Textile Co., Ltd.: Company, Zaozhuang Product Quality Supervision and Inspection Institute: The main drafters of this document are: Ji Yijun, Wu Jiashun, Duan Lihui, Li Xiaozhang, Li Yang, Zheng Hong, Chen Wen, Zhao Lixin, Jing Shenquan, Wang Liyong, Zhao Jie, Li Xuejian, Liu Jianzhong, Fang Bin, Xu Jiongjiong, Liu Chunguo, Li Qi, Su Xueliang, Zheng Minbo, Cui Yihuai, Liu Bing: The previous versions of this document and the documents it replaces are as follows:

---First published as GB/T 5324-1985 in 1985, first revised in 1989, second revised in:1997, third revised in:2009 revision;

1 Scope

China's national standard for cotton and polyester blended grey yarn. Polyester-cotton is the most-used blend in textiles and the compromise everyone settled on: cotton gives absorbency and comfort against the skin, polyester gives strength, dimensional stability and a fabric that dries and does not crease, and the ratio is what a garment maker chooses between them. Grey yarn is the yarn as spun, before bleaching or dyeing, and it is what is traded between spinners and weavers in enormous volume. The standard's practical content is that its requirements attach to a defined spinning route: it applies to ring-spun yarn including traditional ring spinning, siro spinning, compact spinning and siro compact spinning, and those differ in the hairiness, strength and evenness they produce from the same fibre, which is exactly what the buyer is paying for. It specifies the product classification, marking, requirements, inspection rules, marking and packaging, and describes the relevant test methods.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document: GB/T 2543:

1 Textiles - Determination of yarn twist - Part 1: Direct counting method GB/T 2910:

11 Quantitative chemical analysis of textiles Part 11: Mixtures of cellulose and polyester fibers (sulfuric acid method) GB/T 3292:

GB/T 3916 Textiles - Determination of breaking strength and elongation of single yarn in packaged yarn (CRE method)

GB/T 4743-2009 Textiles - Determination of linear density of skeined yarn in package

GB/T 6529 Standard atmospheres for conditioning and testing textiles

GB/T 8170 Rules for rounding off values and expression and determination of limit values

GB/T 43955 Inspection, marking and packaging of cotton and chemical fiber pure and blended yarns FZ/T 01050-1997 Classification and inspection methods for textile yarn defects Capacitive FZ/T 01086 Textile yarn hairiness determination method - Projection counting method

3 Terms and definitions

There are no terms or definitions that require definition in this document:

4 Product classification and labeling

1 Cotton and polyester blended grey yarn products are classified according to different production processes, blending ratios and linear densities: 4:

2 The production process and raw material codes of cotton and polyester blended natural yarn are represented by English letters: AA for siro spinning and AA for compact spinning The code for siro compact spinning is AAJM, and the code for traditional ring spinning production process is not marked; the code for cotton (combed cotton) is C, and the code for combed cotton is The code for cotton is JC, and the code for polyester is T: 4:

3 The blending ratio of the product is expressed in the standard mass ratio, generally listed in descending order of fiber content: When the content of two fibers is the same, the fiber content is The order of arrangement can be arbitrary: 4:

4 When marking cotton and polyester blended natural yarn, the production process (or

code) and raw material name (or code) of the yarn should be indicated before the linear density: and its blending ratio: Example 1: The yarn density of cotton and polyester blended natural yarn is 18:5tex, the polyester content is 65%, and the cotton content is 35%, which can be written as: T/C65/3518:5tex: Example 2: The density of the natural color yarn of Siro compact spinning combed cotton and polyester blend is 13:1tex, the combed cotton content is 60%, and the polyester content is 40%, which can be written as: AA

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