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

GB/T 36976-2018

**Textiles - Quantitative chemical analysis - Mixtures of polyimide
with certain other fibres**

纺织品 定量化学分析 聚酰亚胺纤维与某些其他纤维的混合物

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed by the China National Textile and Apparel Council. This standard is under the jurisdiction of the National Textile Standardization Technical Committee (SAC/TC209). This standard was drafted. China Textile Standard Inspection and Certification Co., Ltd., Fujian Nanfang Co., Ltd., Shenzhen Changshuo New Textile Materials Limited company, Fujian Province Fiber Inspection Bureau, Fujian Changle Mayor Textile Co., Ltd. The main drafters of this standard. Zhang Huanran, Zhang Hui, Li Zuan, Yan Chunhong, Ma Yuan, Xu Baiqing, Chen Jialiang, Tian Xiaorui, Chen Minghong, Huang Zujian, Jiang Hong. Quantitative chemical analysis of textiles a mixture of polyimide fibers and certain other fibers

1 Scope

China's national method for the quantitative chemical analysis of textile mixtures containing polyimide fibre. It specifies the chemical methods for determining polyimide content in two-component mixtures after non-fibrous matter has been removed. Quantitative chemical analysis of textiles works by dissolving one component and weighing what remains, and every fibre pair needs its own solvent and its own conditions: the reagent must remove one fibre completely while leaving the other unchanged in mass, and the correction factor for the small amount of damage it does anyway has to be established. That is why these standards proliferate fibre by fibre. Polyimide is a recent arrival in textiles - a high performance fibre that is inherently flame resistant, keeps its strength at temperatures that destroy other polymers, and is used in protective clothing and filtration. Its extreme chemical resistance is what makes the analysis tractable: it survives reagents that dissolve almost everything else.

This standard specifies the use of chemical methods to determine the content of polyimide fibers in the following two component mixtures after removal of non-fibrous materials. method.

---Polyimide fiber; and

--- Certain protein fiber (wool, special animal hair fiber, silk, etc.), cellulose fiber (cotton, linen, viscose, etc.), polyacryl Amine fiber, polyacrylonitrile fiber, polyester fiber, polytetrafluoroethylene fiber and polyphenylene sulfide fiber. This standard applies to mixtures containing polyimide fibers.

2 Normative references

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

GB/T 2910.1 Textiles - Quantitative chemical analysis - Part 1. General rules

GB/T 2910.4 Textiles - Quantitative chemical analysis - Part 4. mixtures of certain protein fibres with certain other fibres Chlorate method)

GB/T 2910.7 Textiles - Quantitative chemical analysis - Part 7. Mixtures of polyamide fibres with certain other fibres (formic acid method)

GB/T 2910.11 Textiles - Quantitative chemical analysis - Part 11. Mixtures of cellulose fibres and polyester fibres

3 Principle

After qualitative identification of the sample, select appropriate reagents to dissolve and remove one of the components, collect the residue, wash, dry and weigh, then use The corrected mass is calculated as the mass percentage of polyimide fibers to certain other fibers.

Note. See Appendix A for the qualitative identification test method.

4 General rules of testing

Analytically pure reagents for testing, distilled water and instruments, sample preparation, test procedures, drying, cooling, weighing and analysis of samples and insoluble fibers The calculation of the results is carried out in accordance with the provisions of GB/T 2910.1. If the test method is different from the above provisions, the test results are Listed in the body test method.

5 Mixture of polyimide fiber with certain protein fibers (hypochlorite method)

5.1 Principle Dissolve protein fibers from a mixture of known dry mass with a hypochlorite solution, collect the residue, wash, dry and weigh Weight; the corrected mass is used to

calculate the percentage of polyimide fiber in the dry mass of the mixture. From the difference, the quality of protein fiber is obtained.

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