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

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**Quantitative test method for foreign fibre in raw cotton - Manual
method**

原棉异性纤维定量试验方法 手工法

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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 of Standardization Documents" drafted. Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed and managed by the National Fiber Standardization Technical Committee (SAC/TC513). This document is drafted by: Jiangyin Fiber Inspection Institute, Changzhou Food and Drug Fiber Quality Supervision and Inspection Center, Jiangsu Fiber Inspection Bureau, Aksu Regional Inspection and Testing Center, Xuzhou Inspection and Testing Center, Lianyungang Fiber Inspection Center, Jiangyin Xiefeng Cotton and Linen Co., Ltd., Jiangsu Huaxing Crimped Oil Co., Ltd. The main drafters of this document. Wang Hongshan, Lu Yongliang, Feng Xiaojian, Jin Yongsheng, Liu Cheng, Ding Shiyong, Xu Aiwu, Wang Xiaohui, Wang Huiping, Xu Yong, You Li, Sang Aichun, Hua Ronghua, Zhang Wei, Yi Feng. Quantitative test method for foreign fibers in raw cotton Manual method

1 Scope

China's national manual method for quantifying foreign fibre in raw cotton. Foreign fibre - the trade calls it contamination - is anything in a cotton bale that is not cotton: polypropylene from the twine and the module wrap, hair, feathers, jute from sacking, coloured thread, and plastic film. It is the defect that spinners complain about most and that costs the most, because a single strand of polypropylene passes through spinning and weaving invisibly and then appears in the finished fabric after dyeing as a white streak that has taken no dye. By that point the cloth is made. No automatic system detects it all, which is why the method is manual: cotton is spread and picked over by hand under controlled lighting, and the foreign matter is collected, classified and weighed. It is laborious and it is the reference against which the automatic detection on a ginning line is judged.

This document describes a test method for the manual determination of the foreign fiber content of raw cotton. This document applies to raw cotton, including sawtooth cotton and cot cotton.

2 Top roller processing fine staple cotton

GB/T 8170 Numerical Rounding Rules and Representation and Judgment of Limit Values

GB/T 32139 Cotton Processing Terms

3 Terms and Definitions

GB/T 32139 and the following terms and definitions apply to this document.

3.1 foreignfiber Non-cotton fibers and non-natural cotton fibers mixed into cotton.

Note. Such as chemical fiber, hair, silk, hemp, plastic film, plastic rope, dyeing thread (rope, cloth), etc. [Source: GB/T 32139-2015, 2.1.5, with modifications]

3.2 The ratio of the quality of the foreign fibers picked out in the raw cotton sample to the quality of the sample.

Note. The unit of foreign fiber content is grams per ton (g/t).

3.3 The ratio of the quality of the plastic film heterosexual fibers picked out from the raw cotton sample to the quality of the sample.

Note. The unit of plastic film foreign fiber content is grams per ton (g/t).

3.4 The quality of other anisotropic fibers (chemical fibers, hair, silk, hemp, plastic rope, dyeing thread (rope, cloth), etc.) ratio of sample mass.

Note. The unit of other heterozygous fiber content is grams per ton (g/t).

3.5 numberofforeignfiber The number of foreign fibers picked out from the raw cotton sample.