

ICS 59.080.01  
CCS W 04



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

**GB/T 47786-2026**

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**Textiles - Qualitative analysis of some bast fibres (flax, hemp,  
ramie) and their blends - Microscopy methods**

纺织品 某些韧皮纤维（亚麻、大麻、苧麻）及其混合物定性分析 显微镜法  
**(English Translation)**

**Issued on: July 2, 2026**

**Implemented on: February 1, 2027**

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**Issued by: State Administration for Market Regulation**

## Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

### Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is modified to adopt ISO 20706-1:2019, "Textiles - Certain bast fibers (flax, hemp, ramie) and mixtures thereof - Qualitative and characterization".

Quantitative Analysis Part 1: Microscopic Identification.

This document has undergone the following structural adjustments compared to ISO 20706-1:2019.

---Chapter 5 corresponds to Chapter 6 of ISO 20706-1:2019;

---Chapter 6 corresponds to Chapter 5 of ISO 20706-1:2019.

---ISO 3696 has been replaced with the normatively referenced GB/T 6682 (see Chapter 5), and the normatively referenced GB/T 2828.1 has been added.

(See Appendix H) to adapt to my country's technical conditions and increase operability;

---Glycerin (see 6.2 of ISO 20706-1:2019) has been removed from the reagent list for ease of understanding;

---A scanning electron microscope (see 6.1) has been added to the equipment to facilitate understanding and improve the consistency of experimental procedures;

---The longitudinal morphological description of flax, hemp, or ramie under a scanning electron microscope is changed to a note (see 7.2.2);

---The decolorization treatment of difficult-to-identify dyed fibers is changed to a note (see 8.2.1);

---Decolorization instructions have been added to the test report (see Chapter 9), improving the consistency of test procedures.

The following editorial changes have been made to this document.

---To harmonize with existing standards, the standard title has been changed to "Textiles. Certain Bast Fibers (Flax, Hemp, Ramie) and Their Mixtures".

Sexual analysis microscopy;

---Added annotations to the scanning electron microscope image magnification calibration method in version 6.1;

---Some images in Appendix A, Appendix B, and Appendix C have been replaced;

---The description of the preliminary tissue experiments in Appendix D has been deleted.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no 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 Textile Standardization Technical Committee (SAC/TC209).

## 1 Scope

This document describes the use of optical microscopy (LM) and scanning electron microscopy (SEM) to identify certain bast fibers (flax, hemp, ramie).

The method of (hemp).

This document applies to certain bast fiber blends (flax, hemp, ramie) and their products.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to this document, only the version corresponding to that date applies. For undated references, the latest version (including all amendments) applies.

This document.

GB/T 2828.1 Sampling Procedures for Inspection by Attributes - Part 1: Sampling Schemes Retrieved by Acceptable Quality Limit (AQL) for Lot-by-Lot Inspection (GB/T 2828.1-2012, ISO 2859-1:1999, IDT) GB/T 6682 Specifications and test methods for water used in analytical laboratories (GB/T 6682-2008, ISO 3696:1987, MOD) GB/T 47787-2026 General rules for quantitative analysis of textiles under a microscope (ISO 20705:2019, MOD)

### 3 Terms and Definitions

The following terms and definitions apply to this document.

Fibers obtained from the phloem of some plants are mainly composed of cellulose and its associated substances and intercellular matrix (pectin, hemicellulose, lignin).

It consists of (etc.).

**Note:** Adapted from GB/T 11951-2018, 2.3.

Flax

Fiber obtained from the phloem of flax stems.

**Note:** Adapted from GB/T 11951-2018, 3.2.2.5.

marijuana hemp

Fibers obtained from the phloem of the hemp stem.

**Note:** Adapted from GB/T 11951-2018, 3.2.2.1.

Ramie

Fibers obtained from the phloem of ramie stems.