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

GB/T 3917.1-2009

Replacing GB/T 3917.1-1997

**Textiles -- Tear properties of fabrics -- Part 1: Determination of
tear force using ballistic pendulum method (Elmendorf)**

纺织品 织物撕破性能 第1部分：冲击摆锤法撕破强力的测定

(English Translation)

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Foreword

GB/T 3917 "Tear properties of fabrics Textiles" is divided into the following five sections.

- Part 1. Ballistic pendulum method Determination of tear force;
- Part 2. Pants shaped test specimens (single slit) Determination of tear force;
- Part 3. Determination of tear force of trapezoidal shaped test specimens;
- Part 4. tongue shaped test specimens (double seam) Determination of tear force;
- Part 5. Sample wing (single slit) Determination of tear force.

This section GB/T 13917 Part of.

This section uses the translation method identical with ISO 13937-1:2000 "Textiles Tear properties of fabrics - Part 1. Ballistic pendulum method tear Determination of bursting strength "(in English).

There are differences compared to 2000 are as follows. ISO 13937-1 and this part.

- Deleted international standards preface, table of contents and introduction;
- Deleted Chapter 1 Note;
- References to the corresponding national standards with international standards in normative references, delete a reference standard;
- Adjust the order of the original international standard appendix.

This Part replaces GB/T 3917.1-1997 "Textiles Tear properties of fabrics - Part 1. Determination of tear force using ballistic pendulum law". This portion of the GB/T 3917.1-1997 main differences are as follows.

--- 6.1 has been modified;

--- Of 6.2 were editorial changes;

--- Delete Chapter 7 secondary standard atmosphere;

Adjusted 8.1 --- Note the part of the body;

--- Increase described in paragraph 9.3 of the first test results of the conversion unit, refined and effective test conditions;

--- Increase the results described in Chapter 10 of the conversion and the calculation of the coefficient of variation and confidence interval;

--- Increased 11.1 General information on the "described the observed anomaly torn state";

--- Added Appendix C of C. Content 5.

This part of the Annex A, Annex B and Annex C is informative appendix.

This part is proposed by the China Textile Industry Association.

This part of the National Standardization Technical Committee on Basic Standards Subcommittee Textiles (SAC/TC209/SC1) centralized.

This section is drafted. Suzhou Fiber Testing, Textile Standard (Beijing) Co., Inspection and Certification Center.

1 Scope

GB/T 3917 provisions of this part of the fabric was determined using the method of tear force using ballistic pendulum method. By applying a certain size suddenly the force measurement from a single incision slit tear the fabric to the desired length of a predetermined force.

This section applies to woven fabrics, also applicable to other technology to produce fabrics, such as non-woven fabric.

This section does not apply to knitted, woven elastic fabric and the possibility of tearing the transfer scrim and having a higher anisotropy Fabrics.

2 Normative references

The following documents contain provisions which, through reference to GB/T 3917 this section, constitute provisions of this part. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, we are encouraged to reach agreement under this section the parties proposed to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 6529 Textiles conditioning and testing using standard atmosphere (GB/T 6529-2008, ISO 139:2005, MOD) GB/T 19022 Measurement management systems for measurement processes and measuring equipment (GB/T 19022-2003, ISO 10012.

2003, IDT)

3 Terms and Definitions

The following terms and definitions apply GB/T 3917 of this section.

Under specified conditions, the expansion of the initial incision required to force the specimen.

NOTE: The yarns are torn called "warp tear strength," weft torn off called "zonal tear strength." 3.2 Starting urged to terminate the incision extended distance.

Principle 4

Sample fixed in the fixture, the sample was cut a notch, released at the maximum potential energy of the pendulum position, the movable clamp fixture leave when the sample is torn along the direction of the cut, the fabric tearing a length in terms of work done to tear force.

5 Sampling

Sampling according to product standards or the relevant agreement.

If no such request, recommended sampling provisions of Appendix A of.

Appendix B gives a sample cut from the laboratory sample taken examples. Avoid wrinkles, non-representative area selvedge and fabric.

6.1 General

GB/T 3917.1-2009/ISO 13937-1:2000