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

GB/T 11047-2008

Replacing GB/T 11047-1989

**Textiles - Evaluation for the snagging degree of fabrics - Mace
test method**

纺织品 织物勾丝性能评定 钉锤法

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Foreword

This Standard is the revision to GB /T 11047-1989 Fabric Snagging Test Method. Compared with GB/T 11047-1989, the major changes of this Standard are as follows: - The name of the standard was changed to "Textiles - Evaluation for the snagging performance of fabrics - Mace test method"; - Relevant provisions in Method B (syringe method) were deleted; - Terms such as small snagging, middle snagging, long snagging, warp test and weft test were deleted; - Sample in Chapter 6 and test sample in Chapter 8 were combined (see Chapter 7); - Chapter 9 and Annex A are incorporated into Chapter 5 (see

5.1 and 5.3); - Snagging state description was added, and the rating method was changed from sample comparison rating to visual description rating (see 9.5); - Evaluation provisions of snagging performance were added (see Chapter 10); - Sample cutting drawing in Annex C was included into the chapter of sample (see 7.3). This Standard shall replace GB/T 11047-1989, from the date of implementation. Annex A of this Standard is normative annex. This Standard was proposed by China Textile Industry Association. This Standard is under the jurisdiction of the Basic Standard Branch of National Technical Committee of Textiles Standardization Administration of China (SAC/TC 209/SC 1). The responsible drafting organization is National Textile Products Quality Supervision and Inspection Center. The chief drafting staffs of this Standard. Li Xiaowen, Wang Baojun, and Cai Qianhong. This Standard replaces the following historical edition. -GB/T 11047-1989. Textiles - Evaluation for the snagging performance of fabrics - Mace test method

1 Scope

GB/T 11047-2008 is the Chinese national standard on textiles - evaluation for the snagging degree of fabrics - mace test method, in the field of textile and leather technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 June 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 March 2009. Classification: ICS 59.080.30, CCS W04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

The standard specifies test methods and evaluation indicators for using mace test method to measure the snagging performance of fabrics. This Standard applies to knitted and woven fabrics and other snagging-prone fabrics, especially to chemical filament and its textured yarn fabrics. This Standard does not apply to mesh structure fabrics, non-woven fabrics and tufted fabrics.

2 Normative references

The provisions contained in the following documents become part of this Standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 6529 Textiles - Standard atmospheres for conditioning and testing (GB/T 6529-2008, ISO 139. 2005, MOD)

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions shall apply.

3.1 Snagging The coil, fiber (bundle) ring-shaped, fluff or other scraggy defects which are formed when the yarn or fiber of the fabric is snagged by sharp objects or ticked up and floated on the surface of the fabric.

3.2 Snagging lenght The length from the end of the snagging to the fabric surface;

4 Principle

The cylindrical sample is tricked on the drum; the mace suspended with a chain is placed

on the surface of the sample. When the drum rotates at a constant speed, the mace randomly flips and jumps on the surface of the sample, and hooks the sample, snagging is produced on the test sample.

5 Instruments and auxiliary materials

5.1 Mace snagging instrument Mace snagging instrument shall meet the following conditions, the structure is shown in Figure 1 (the calibration of the instrument is based on Annex A).

5.2 Test instruments

5.2.1 Caliper, for setting position of the mace. 5.2.2 8 rubber rings, for fixing the sample (other resilient "O" ring can also be used).

5.2.5 Magnifying glass, for checking the needle tip.

5.2.6 Sewing machine.

5.2.8 Steel ruler, with indexing of 1mm.

5.2.9 Evaluation boards, with thickness not exceeding 3mm, and the breadth is 14mm x 280mm.

5.3 Rating box Rating box shown in Figure 2 is used. Light source of rating box uses 12V, 55W, quartz halogen lamps.

6 Humidifying and standard atmosphere for the test

6.1 Test shall use the standard atmosphere specified in GB/T 6259.

7 Test sample

7.1 Sampling method and the number of samples are subject to the provisions of the product standard or agreed by relevant parties.

7.2 Take a sample of at least 550 mm x full-breadth; never take the sample within 1m from the end; samples shall be smooth and wrinkle-free.

7.4 The positive side of the sample is relatively sewed into a cylinder shape, and its circumference shall be adapted with that of the drum. The circumference of non-elastic fabric test sample sleeve is 280mm, the circumference of elastic fabric (including more-flexible fabric) test sample sleeve is 270 mm. Turn over the stitched cylindrical sample to be front side facing outward. If the sample set on the drum is too loose or too tight, it may appropriately reduce or increase the circumference to make it fit appropriately.

8 Test procedures

8.1 Unfold the slit of the cylindrical sample to both sides, and carefully trick it onto the drum, so that the seam is smooth. For sample with horizontal direction of the fabrics, make the head of the vertical coils of one sample towards left, that of another sample towards right. Then fix one end of the sample with rubber ring, unfold all the wrinkles and make the sample's surface to be round, and then fix the other end with another rubber ring.

8.2 Samples on the warp (vertical) and weft (horizontal) direction shall be randomly attached to a different drums, that is, the warp and weft of the sample is not necessarily to be tested on same drum.

8.3 Make the mace bypass the guide rod, and set the position of mace with a caliper.

8.6 If the snagging rating difference of the samples in the same direction is more than one grade, 2 additional samples shall be tested.

9 Ratings and test results

9.1 After the sample is removed, it shall be placed for at least 4 h before rating.

9.2 Sample is fixed on the evaluation board in such a manner that the rating area is on the front side of the evaluation board. Length

9.7 Respectively calculate the average snagging performance on the warp (vertical) and weft (horizontal) of the sample (including additional test samples) as the final snagging rating in the direction; if the average value is not an integer, round to the nearest 0.5, and represent it with " - ", e.g. 3-4.

10 Evaluation of the snagging performance

If necessary, evaluate snagging performance of the sample. ≥ 4 indicates a good anti-snagging capability; $\geq 3-4$ indicates a normal anti-snagging capability; ≤ 3 indicates poor anti-snagging capability.

Note. If agreed by the relevant parties, it shall be evaluated according to such agreement.

11 Test report

The test report shall include the following content.