



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

GB/T 33732-2017

**Textiles -- Determination of resistance to water penetration --
Impact penetration test**

Issued on: May 12, 2017

Implemented on: December 1, 2017

Issued by: AQSIQ; SAC

Table of Contents

Foreword...	3
1 Scope...	5
2 Normative References...	5
3 Terms and Definitions...	5
4 Principle...	5
5 Safety Precaution...	6
6 Reagent...	6
7 Apparatus...	6
8 Atmosphere for Conditioning...	8
9 Specimen...	8
10 Procedures...	8
11 Result Calculation and Expression...	8
12 Test Report...	8

Foreword

This Standard was drafted as per the rules specified in GB/T 1.1-2009 and GB/T 20000.2-2009.

This Standard adopts re-drafting method to modify and use ISO 18695.2007 Textiles

- Determination of Resistance to Water Penetration - Impact Penetration Test.

Compared with ISO 18695.2007, this standard has the major technical differences and causes as follows.

--- On the normative reference documents, this Standard has made the adjustment of technical differences, so that adapt to China's technical conditions; the adjustment situations focus on reflecting on the Clause 2 "Normative References"; use GB/T 6529 that modifies and adopted the international standard to replace ISO 139 (see Clause 8).

--- Modify two instrument physical diagrams in ISO 18695.2007 into schematic diagram; delete the corresponding 7.1.1 and 7.1.2, so that facilitate the

understanding of the corresponding clauses.

--- Supplement the contents of Item f) in Clause 12 of ISO 18695.2007; add the report test surface and report value situations, so that the report can be more complete.

For ease of use, this Standard made the following editorial changes as follows.

--- Modify the terminology in 3.1 of ISO 18695.2007 into "resistance to penetration by water";

--- Adjust the Footnote 1 and Footnote 2 in ISO 18695.2007 into the NOTES in 7.1 and 7.2; and simplify them;

--- Adjust the metal spring clip quality requirements in structural diagram of ISO

18695.2007 into consistence with the requirements specified in 10.1;

--- Adjust the relative positions of each view in the structural diagram of ISO 18695.2007;

--- Adjust the order of Item e) and Item f) in Clause 12 of ISO 18695.2007.

This Standard was proposed by China National Textile and Apparel Council.

This Standard shall be under the jurisdiction of National Technical Committee for Standardization of Textiles (SAC/TC 209).

Drafting organizations of this Standard. Zhejiang Shengshan Technology Textile Co., Ltd., CTTC (Beijing) Inspection and Certification Center Co., Ltd., Shandong Ruyi Textiles - Determination of Resistance to

Water Penetration - Impact Penetration Test

1 Scope

This Standard specifies the test method to measure the fabric resistance to water penetration under the low impact conditions. This method can be used to predict the anti-rain and pervaporation properties of fabrics.

This Standard is applicable to the fabrics been subject to or not been subject to the waterproof or water repellent finishing. Compared with severe-role of Bounds method (GB/T 14577) or leaching method (GB/T 23321), this method is more suitable for

fabrics with medium loose structures.

This Standard is not applicable to the fabrics that can't be flattened under certain tension conditions.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 6529 Textiles - Standard Atmospheres for Conditioning and Testing (GB/T 6529-2008, ISO 139.2005, MOD)

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 Resistance to penetration by water

The ability of fabric resistant to the water wetting and penetration.

4 Principle

Spray a certain amount of water, on the height of (610 ± 10) mm away from to-be-tested

8 Atmosphere for Conditioning

Perform conditioning against the specimen according to the standard atmospheric conditions stipulated in GB/T 6529; the conditioning of specimen and absorbent water shall be performed at least 4h.

9 Specimen

Cut at least 3 blocks of specimen with size of (178 ± 10) mm x (330 ± 10) mm from the to-be-tested sample; the warp (or longitudinal) of the fabric shall be consistent with the specimen length direction.

10.1 Clamp one end of the specimen along the width direction onto the steel plate

with metal spring clip, the clip-mouth length of metal spring clip is (152 ± 10) mm; clamp the other end of specimen by the metal spring clip with clip-mouth length of (152 ± 10) mm, total mass of (0.45 ± 0.05) kg; then the specimen test surface shall be sprayed. Weigh the mass of white absorbent paper with size of (152 ± 10) mm x (229 ± 10) mm, accurate to 0.1g; and insert it in between the specimen and test bench.

10.2 Pour (500 ± 10) mL of reagent into the funnel of tester to start spraying; try to

avoid the swirl phenomenon during water pouring process.

10.3 After the spraying (2s after continuous spraying stops), carefully take out the

absorbent paper, swiftly weigh the mass of absorbent paper, accurate to 0.1g.

11 Result Calculation and Expression

Take the increasing amount of absorbent paper mass in the test as the penetration amount; calculate the average value of at least 3 blocks of specimens, in "g".

When the average value of the specimen test results or single specimen test value exceeds 5g, it can be expressed by "+5g" or ">5g" simply.

12 Test Report

The test report shall contain the following contents.

a) This Standard number, namely, GB/T 33732-2017;

.....