

SHANGHAI XM GROUP LTD  
ROOM 2403, ZHONGYI INTERNATIONAL BUSINESS BUILDING NO.1833, NORTH ZHONGSHAN ROAD,  
PUTUO DISTRICT, SHANGHAI

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : Woven fabric: 65% Polyester 33% Cotton 2% AS, twill 2/1, 180gsm, 150cm  
in static blue (XMT-17-55 Clean Static-180)

Proposed Care Instruction : 

Test Performed : Selected test(s) as requested by applicant

Sample Receiving Date : Aug 14, 2017  
Testing Period : Aug 14, 2017 - Aug 17, 2017

Test Result(s) : Unless otherwise stated the results shown in this test report refer only to the  
sample(s) tested. For further details, please refer to the following page(s).

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co. Ltd

*Hattie Chen*

Hattie Chen  
Account Executive



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**Test Result**

**Dimensional Stability To Washing**

(ISO 5077: 2007 / ISO 3759: 2011 / ISO 6330: 2012: Washing program No. 6N; Using horizontal axis, front-loading type machine: Machine wash at 60 degree C with 2kg total dry mass (type III (100% polyester) ballast+ specimen) and 'ECE' (A) detergent+ Sodium perborate+ TAED, tumble dry low less than 50 degree C.)

**After 5 Washes**

Lengthwise(%)	-1.6
Widthwise(%)	-0.5

Remarks: (+) Means extension (-) Means shrinkage

**Colour Fastness To Washing**

(ISO 105-C06:2010; Test No. C2S, Machine wash at 60 degree C with 4g/l 'ECE(B)' detergent and 1g/l Sodium perborate solution with 25 steel balls.)

Change in shade	4-5
Staining on multi-fiber stripe	
Acetate	4-5
Cotton	4-5
Nylon	4
Polyester	4-5
Acrylic	4-5
Wool	4-5

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good

**Colour Fastness To Perspiration**

(ISO 105-E04:2013; test specimen in vertical position.)

**Acid**

Change in shade	4-5
Staining on multi-fiber stripe	
Acetate	4-5
Cotton	4-5
Nylon	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5



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Alkaline

Change in shade	4-5
Staining on multi-fiber stripe	
Acetate	4-5
Cotton	4-5
Nylon	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good

**Colour Fastness To Rubbing**

(ISO 105-X12:2016; Size of rubbing finger: 16mm diameter.)

Dry staining	4-5
Wet staining	4

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good

**Colour Fastness To Light**

(ISO 105-B02:2014; use Xenon arc lamp, exposure cycle A1, no flip-flop mode was used)

Comparison upto blue wool reference 4	
Grade (Bluewool Std)	4

**Tensile Strength**

(ISO 13934-1:2013; CRE-50mm strip)

Warp (N)	1600
Weft (N)	730

**Tearing Strength**

(ISO 13937-2:2000; )

After 5 washes	
Warp yarns torn (N)	40
Weft yarns torn (N)	35

Washing Procedure: Same as shrinkage.





**Pilling Resistance**

(ISO 12945-2:2000; Martindale Abrasion & Pilling Tester, Total Load Applied 415g.)

As received	
<u>After 125 rubs</u>	
Rating	4-5
<u>After 500 rubs</u>	
Rating	4-5
<u>After 1000 rubs</u>	
Rating	4-5
<u>After 2000 rubs</u>	
Rating	4

- Remarks: Pilling Rating
- 5 No change
  - 4 Slight surface fuzzing and/or partially formed pills
  - 3 Moderate surface fuzzing and/or moderate pilling. Pills of varying size and density partially covering the specimen
  - 2 Distinct fuzzing and/or distinct pilling. Pills of varying size and density covering a large proportion of the specimen surface
  - 1 Dense surface and/or severe pilling. Pills of varying size and density covering the whole of the specimen surface

**Abrasion Resistance**

(ISO 12947-2:1998/Cor.1:2002(E); Martindale Wear & Abrasion Tester; 12 kPa Pressure)

Endpoints (rubs) >20000

\*\*\* End of Report \*\*\*



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