

Report No.: 0154179605a 001

Client: SHANGHAI XM TEXTILES CO., LTD.

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Contact Person: Xia Qianqian

Sample Description as Declared:

No. Of Sample : One(1)
Component/Material : 65% Polyester 35% Cotton
Sample Description : CANVAS-270,270gsm,150cm
Colour : Navy2#

**Applicant's Provided
Care Instruction/Label:**



Sample Receiving date: 2016-07-04

Testing Period: 2016-07-04 - 2016-07-07



For and on behalf of
TÜV Rheinland (Shanghai) Co., Ltd.

2016-07-08 Carmen Yan / Senior Project Manager

Date Name/Position

*Test result is drawn according to the kind and extent of tests performed.
This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*

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Conclusion:

	<u>M001</u>
Tensile Strength - Strip Test	#
Tearing Strength - Wing Rip Tear	#
Dimensional Change To Washing	#
Abrasion Resistance - Determination Of Specimen Breakdown	#
Pilling Resistance - Modified Martindale Method	#
Colour Fastness To Washing	#
Colour Fastness To Perspiration	#
Colour Fastness To Rubbing	#
Colour Fastness To Light	#
Spray Test	#

Note:	P = Pass	F = Fail
	# = No Comment	- = Did Not Perform
	N/A = Not Applicable	* = See Remark

Material List:

Material No.	Material	Color	Location
M001	Textile	Navy #2	CANVAS-270 65% Polyester 35% Cotton, 270gsm, 150cm

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1. Tensile Strength - Strip Test

Test method : ISO 13934-1:2013

M001
Breaking force

Warp 1800N

Weft 1000N

2. Tearing Strength - Wing Rip Tear

Test method : ISO 13937-3:2000

M001

Warp 64N

Weft 57N

3. Dimensional Change To Washing

 Test method : ISO 3759:2011
 ISO 5077:2007
 ISO 6330:2000+A1:2008

Test condition : Washing programme 2A, at 60°C, with 0.077% ECE Reference Detergent Without Phosphates, 0.02% Sodium Perborate and 0.003% Bleach Activator (TAED) Solution, 2kg loading, tumble dry - normal

Apparatus : Front-loading horizontal rotating drum type

M001
After one wash

Warp -3.0%

Weft -0.5%

 Remark : (+) = Extension
 (-) = Shrinkage

4. Abrasion Resistance - Determination Of Specimen Breakdown

Test method : BS EN ISO 12947-2:1999/Cor1:2002

M001

 No. of rubs to
 breakdown >20000

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5.Pilling Resistance - Modified Martindale Method

Test method : BS EN ISO 12945-2:2000

No. of rubs : 2000

M001

Rating : 3-4

6.Colour Fastness To Washing

Test method : ISO 105-C06:2010

Test condition : C2S, 30 min mechanical wash at 60°C in 0.4% ECE reference detergent with phosphates and 0.1% sodium perborate with 25 steel balls

M001

Colour change : 4-5

Colour staining :

- Triacetate : 4-5

- Cotton : 4-5

- Polyamide : 3-4

- Polyester : 4

- Acrylic : 4-5

- Viscose : 4-5

7.Colour Fastness To Perspiration

Test method : ISO 105-E04:2013

M001

Colour change :

Acid
4-5

Alkaline
4-5

Colour staining :

- Acetate : 4-5 : 4-5

- Cotton : 4-5 : 4-5

- Polyamide : 4-5 : 4-5

- Polyester : 4-5 : 4-5

- Acrylic : 4-5 : 4-5

- Wool : 4-5 : 4-5

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8. Colour Fastness To Rubbing

Test method : ISO 105-X12:2001

M001Dry

- Length 4-5
- Width 4-5

Wet

- Length 4
- Width 4

9. Colour Fastness To Light

Test Method : ISO 105-B02:2014

Apparatus : Xenon-arc lamp

M001

Grade >4

Remark : Up to grade 4

10. Spray Test

Test method : AATCC TM 22-2014

M001

Rating 90

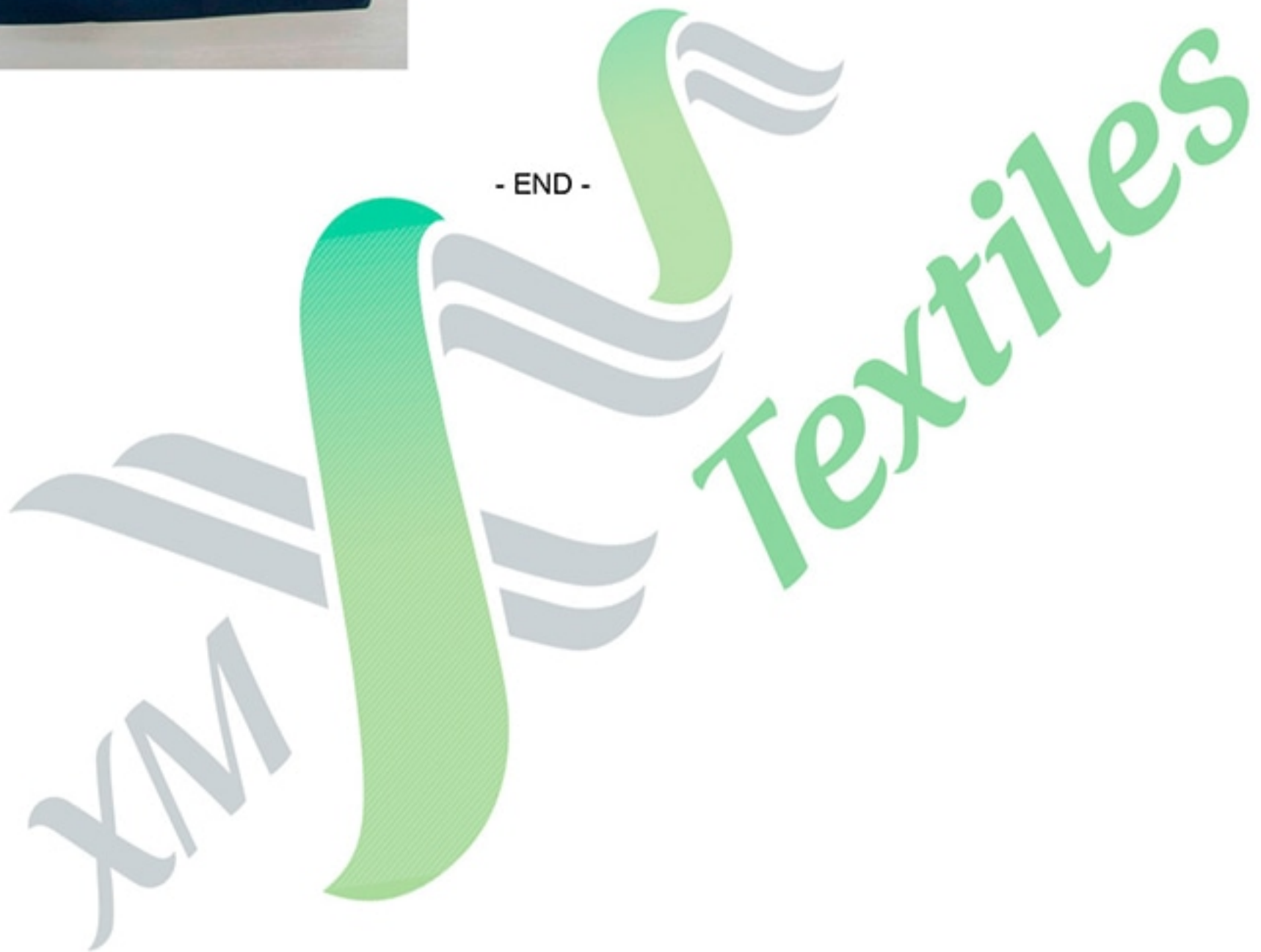
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Sample Photo



- END -

A large, stylized watermark logo for XMM Textiles. The logo features the letters 'XMM' in a grey, sans-serif font on the left, followed by a large, green, stylized 'M' that is composed of several overlapping, curved segments. To the right of the 'M' is the word 'Textiles' in a green, cursive font.