TEST REPORT

No. : NBIN2208010175PS
Date : Sep 07, 2022

scan to see the report
NBIN2208010175PS

CUSTOMER NAME: HUZHOU MAI HONG TEXTILE CO., LTD
ADDRESS: HONGQIAO TOWN INDUSTRIAL PARK,CHANGXING COUNTY, HUZHOU CITY,ZHEJIANG PROVINCE

Sample Name : F213/MH-1292 OUTDOOR FABRIC
Manufacturer : HUZHOU MAI HONG TEXTILE CO., LTD

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

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Date of Receipt : Aug 30, 2022
Testing Start Date : Aug 30, 2022
Testing End Date : Sep 07, 2022
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical Services Co., Ltd Ningbo Branch

Edward Chen
Authorized signatory

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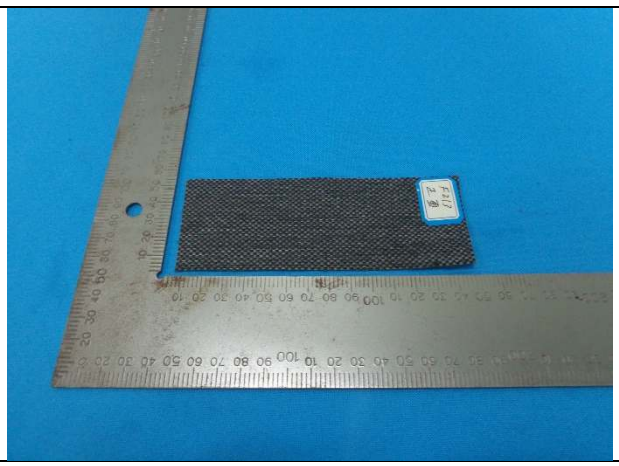
Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Color fastness to rubbing	EN ISO 105-X12:2016	See result	Pass
2	Colour Fastness To Light	ISO 105-B02:2014;Method 2 (Modified)	See result	Pass
3	Colour Fastness to Perspiration	BS EN ISO 105-E04:2013 & ISO 105-A02:1993/Cor.2:2005 & ISO 105-A03:2019	See result	Pass

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/ : Not Apply to the judgment.

Original Sample Photo:



Sample

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1. Test Item: Color fastness to rubbing

Sample Description: Fabric

Test Method: EN ISO 105-X12:2016

Test Condition:

Indenter diameter: 16mm

Loading: 9N

Rubbing speed: 60 times/min

Rubbing times: 10 times

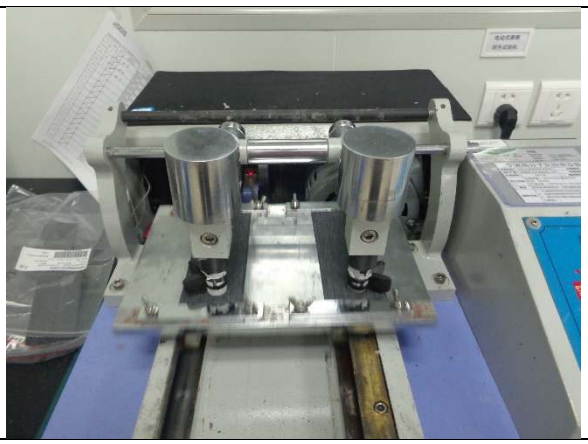
Test fabric: AATCC

Test Result(s):

Test Item	Sample	Staining grey scale	Client's requirement:	Conclusion
Color fastness to rubbing - dry	#1	4-5	≥4	Pass
	#2	4-5		Pass
	#3	4-5		Pass
Color fastness to rubbing - wet	#1	4-5		Pass
	#2	4-5		Pass
	#3	4-5		Pass

Note: According to ISO 105-A03:1993/Cor.2:2005, the staining grey scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.

Test Photo:



During test

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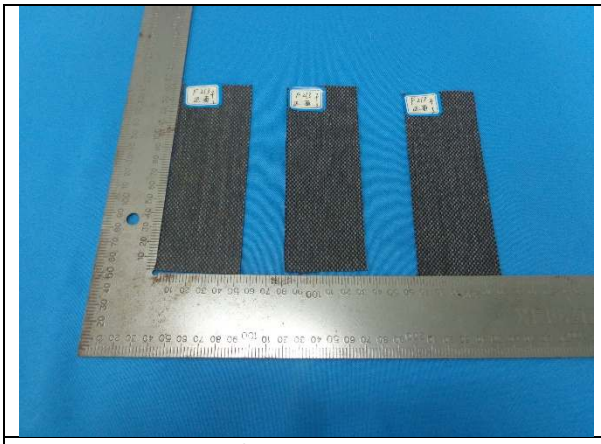
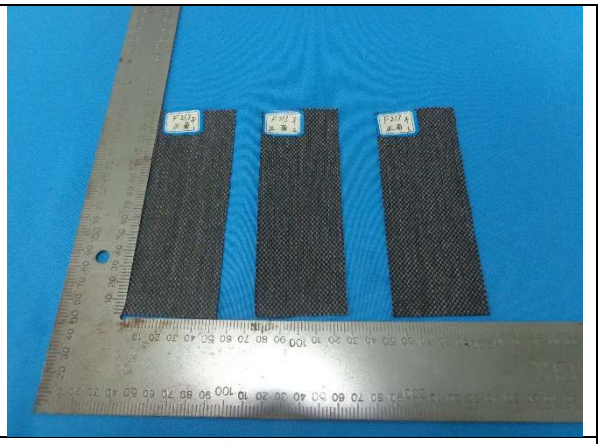
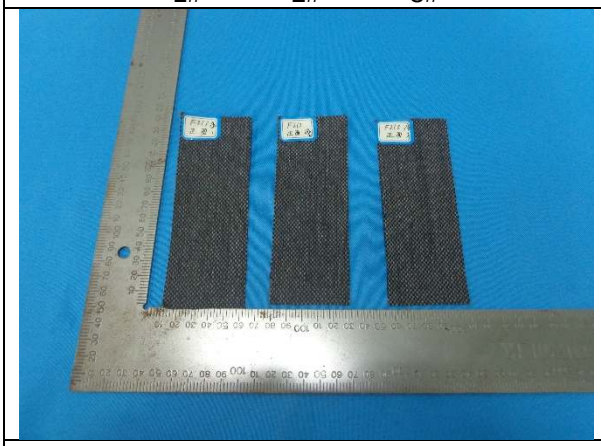
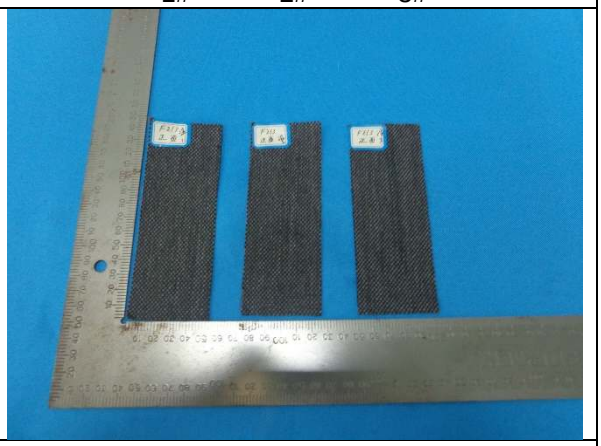
	
Before test – Dry 1# 2# 3#	After test – Dry 1# 2# 3#
	
Before test – Wet 1# 2# 3#	After test – Wet 1# 2# 3#

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Test fabric – Dry	Test fabric – Wet

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Electrodynamic Crocking Test Machine	MY-5223-A	NBPL-A040	2021-07-14	2023-07-13

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TEST REPORT

2. Test Item: Colour Fastness To Light

Sample Description: Fabric

Test Method: ISO 105-B02:2014;Method 2 (Modified), use Xenon arc lamp, Exposure Cycle: A1, no flip-flop mode was used

Test Result:

Test Item	Test Result	Client's requirement	Conclusion
Colour Fastness To Light	4 Grade(B.W.S)	4 Grade	Pass

Note: Comparison up to blue wool reference 4

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TEST REPORT

3. Test Item: Colour Fastness to Perspiration

Sample Description: Fabric

Test Method: BS EN ISO 105-E04:2013 & ISO 105-A02:1993/Cor.2:2005 & ISO 105-A03:2019

Test Condition:

Temperature: (37±2)℃

Pressure: (12.5±0.9)kPa

Exposure duration: 4h

Cotton cloth: ISO 105 F10

Placement: Horizontal

Test Result(s):

Test reagent	Grey scale (see Note 3)	Staining scale (see Note 4)
Alkaline solution (see Note 1)	4-5	Acetate fiber：4-5 Bleached cloth：4-5 Polyamide fiber：4-5 polyester：4-5 Polypropylene acrylic fiber：4-5 Wool：4-5
Acid solution (see Note 2)	4-5	Acetate fiber：4-5 Bleached cloth：4-5 Polyamide fiber：4-5 polyester：4-5 Polypropylene acrylic fiber：4-5 Wool：4-5

Client's requirement: ≥4

Conclusion: Pass

Note:

1.According to BS EN ISO 105-E04:2013 each liter of alkaline solution contains:

0.5g $C_6H_9O_2N_3 \cdot HCl \cdot H_2O$ (AR),

5g NaCl (AR),

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5g $Na_2HPO_4 \cdot 12H_2O$ (AR),

Adjust the pH to (8 ± 0.2) with 0.1mol/l NaOH solution.

2. According to BS EN ISO 105-E04:2013 each liter of Acid solution contains:

0.5g $C_6H_9O_2N_3 \cdot HCl \cdot H_2O$ (AR),

5g NaCl (AR),

2.2g $NaH_2PO_4 \cdot 2H_2O$ (AR),

Adjust the pH to (5.5± 0.2) with 0.1mol/l NaOH solution.

3. According to ISO 105-A02:1993/Cor 2:2005, the grey scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.

4. According to ISO 105-A03:2019, the staining scale was determined under the D65 standard light, with scale 5 as the best and scale 1 as the worst.

Test Photo:

During Test

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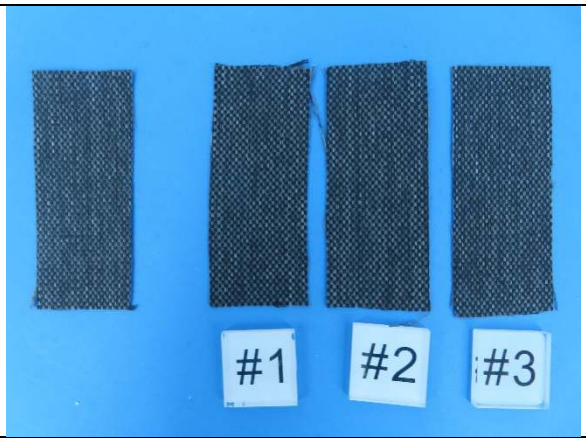
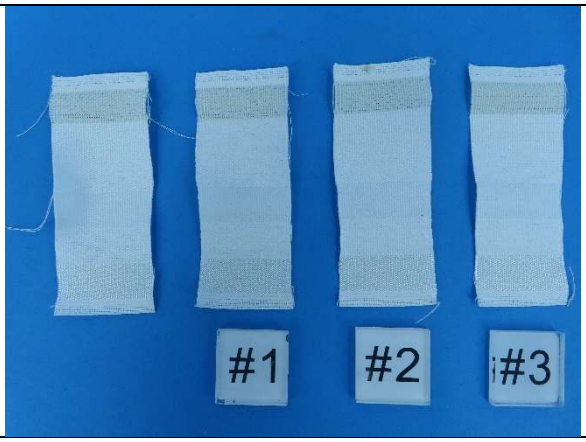
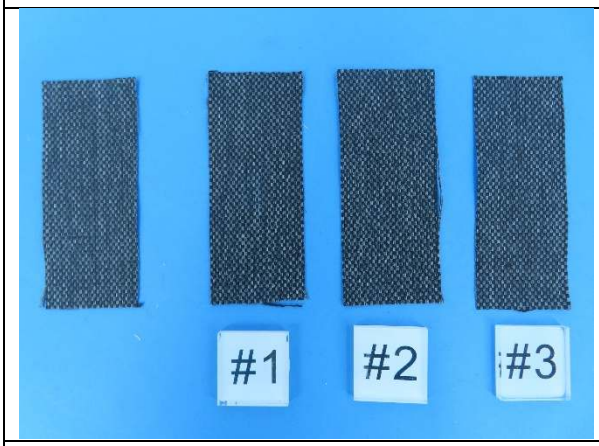
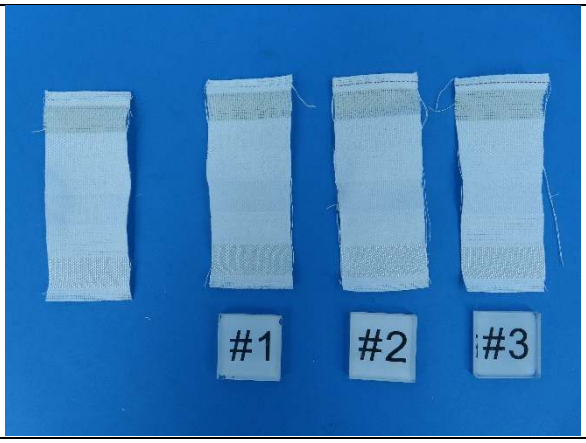
	
Reference sample Tested sample Alkaline solution	Reference cloth Tested cloth Alkaline solution
	
Reference sample Tested sample Acid solution	Reference cloth Tested cloth Acid solution

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Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Electron balance	JJ2000B	GZMR-AG-E308	2022-04-28	2023-04-27
High temperature oven with air circulation	MS-GW-150B	GZMR-PL-E151	2022-07-18	2023-07-17
pH Meter	S220-K	GZMR-AG-E040-06	2021-12-23	2022-12-22
Colour Assessment Cabinet	CAC 120-5	GZMR-AG-E287	2022-07-20	2023-07-19

- Test item3 was carried out by other SGS laboratory.
- The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc… and just for internal reference.

******** End of report********

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