

TEST REPORT

2021CN0485

DATE OF RECEPTION

27/05/2021

DATE TESTS

Starting: 27/05/2021

Ending: 10/06/2021

APPLICANT

HAINING JUSHENG TEXTILE CO., LTD
NO.10 CHAOYANG ROAD, HAINING
ECONOMIC DEVELOPMENTZONE,
HAINING
CN-314400
HAINING

IDENTIFICATION AND DESCRIPTION OF SAMPLES

REFERENCES

BIRDEYE FABRIC

According to the information supplied by the customer:

Fabric reference: Birdeye Fabric

Composition and percentage: 100% Polyester

Color: Flourecent Yellow

TESTS CARRIED OUT

- PHOTOGRAPHY.
- DETERMINATION OF COORDINATES (X,Y,Y).
- COLOUR FASTNESS TO RUBBING.
- COLOUR FASTNESS TO PERSPIRATION.
- COLOUR FASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING.
- PRE-TREATMENT FOR DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING.
- DETERMINATION OF DIMENSIONAL CHANGE IN DOMESTIC WASHING AND DRYING.
- BURSTING RESISTANCE*.
- MEANING OF COLOUR FASTNESS APPRAISAL EVALUATED WITH GREY SCALE.

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Tests marked with * are not included within the scope of the ENAC accreditation



RESULTS

PHOTOGRAPHY



Reference ⁽¹⁾
Birdeye Fabric

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RESULTS

DETERMINATION OF COORDINATES (X,Y,Y)

Standard

ASTM E1164-12

Apparatus

Konica Minolta ((0921E06) 400nm-700nm)

IlluminantD₆₅**Observant**

2°

Measuring geometry

45/0

Specular component and UV filter

Excluded

Observation area

Small

Conditioning of samples**Initiation date** 28/05/2021 **End date** 08/06/2021**Temperature** (20 ± 2) °C **Humidity** (65 ± 5) %**Test date****Initiation date** 31/05/2021 **End date** 08/06/2021**Number of measurements**

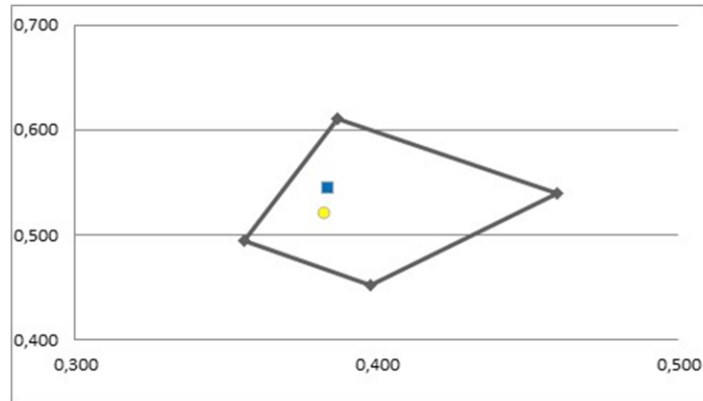
5

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RESULTS

Reference
Birdeye Fabric



Reference	x	y	Y minimum
◆ Coordinate 1	0,387	0,610	0,70
◆ Coordinate 2	0,356	0,494	
◆ Coordinate 3	0,398	0,452	
◆ Coordinate 4	0,460	0,540	
■ Birdeye Fabric (Original)	0,384	0,544	0,85
● Birdeye Fabric (After exposure to Xenon light)	0,383	0,520	0,77
Uncertainty	0.4 %	0.5 %	1 %

REQUISITE

The chromatic coordinates must be situated within the area defined by the coordinates specified in the Standard ANSI ISEA 107:2020 point (8.1) and the luminance no less than 0,70 specified in the Standard ANSI ISEA 107:2020 point (8.1).

PASS

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RESULTS

COLOUR FASTNESS TO RUBBING

Standard

AATCC TM 8:2013

Testing date

31/05/2021

Apparatus

Crockmeter

Scale used

AATCC Gray scale for staining (AATCC evaluation procedure 2)

REFERENCE	DRY STAINING	WET STAINING
Birdeye Fabric	5	5

Requisite

The limit set by the Standard ANSI ISEA 107:2020 for testing of colour fastness to dry cleaning is 4 for change in colour.

PASS

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RESULTS

COLOUR FASTNESS TO PERSPIRATION

Standard

AATCC TM 15:2013

Testing date

10/06/2021

Apparatus

Perspirometer

Scale used

AATCC Gray scale for staining (AATCC evaluation procedure 2)

Aparatus Code 02054I04

REFERENCE	Birdeye Fabric					
CHANGE IN COLOUR	STAINING					
5	Wool	Acrylic	Polyester	Polyamide	Cotton	Acetate
		4-5	4-5	4-5	3-4	4-5

Requisite

The limit set by the Standard ANSI ISEA 107:2020 for testing of colour fastness to perspiration is 4 for change in colour

PASS

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RESULTS

COLOUR FASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING

Standard

AATCC TM61-2013

Apparatus

Gyrowash

Test number

2A

Temperature

40 °C

Steel balls

50

Detergent

Standardized 1993 AATCC WOB detergent

Test piece drying in forced-air circulation dryer

REFERENCE	Birdeye Fabric					
CHANGE IN COLOUR	STAINING					
	Wool	Acrylic	Polyester	Polyamide	Cotton	Acetate
5	4-5	4-5	4-5	4	4-5	4

Requisite

The limit set by the Standard ANSI ISEA 107:2020 for testing of colour fastness to washing is 4-5 for change in colour and 3 for staining.

PASS

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RESULTS

PRE-TREATMENT FOR DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING

Standard

AATCC 135:2018

Standard deviation

Reference

Sample 1 Birdeye Fabric

Washing machine

13373112

Washing cycles

5

Washing procedure

III

Dryer machine

Whirlpool 13098112

Drying procedure

Aiii

Washing powder

AATCC 1993 WOB

Start and finish date

01/06/2021 - 02/06/2021

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RESULTS

DETERMINATION OF DIMENSIONAL CHANGE IN DOMESTIC WASHING AND DRYING

Standard

AATCC 135:2018

Machine cycle

3

Washing temperature

III 41°C ± 3°C

Washing machine

13373112

Drying procedure

Aiii

Temperature drying

65 °C

Dryer machine

13010E12

Number of drying cycles

1

Size of specimens and benchmarks

Option 1 - Samples of 380 x 380 mm and benchmarks of 250 mm.

Size of load

1.8Kg

Number of washing cycles

5

Uncertainty of test (% of the measured value)

± 0.5 %

Original samples had no wrinkles, were not distorted, not used, ironing or restored in any way.

Reference	Number of specimens	Direction	Dimensional change (%)
Birdeye Fabric	3	Lengthwise	-2,7 %
		Crosswise	-1,3 %

REMARK

Negative dimensional change indicates shrinkage

Positive dimensional change indicates lengthening

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RESULTS

Requisite

In accordance with the Standard ANSI/ISEA 107:2020 point (8.3.1), the dimensional change shall not exceed $\pm 7\%$ in lengthwise and $\pm 5\%$ in crosswise for knitted fabrics and all other materials

PASS



RESULTS

BURSTING RESISTANCE*

Standard

ASTM D3787-07: (2016)

Apparatus

Constant-Rate-of-Traverse (CRT) Tensile Testing Machine (CRT)

Test conditions

Dry specimens

Number of specimens tested

5

Reference	Bursting Strength (lbf)	
BIRDEYE FABRIC	1.	112
	2.	110
	3.	108
	4.	107
	5.	116
		111

REQUISITE ACCORDING TO STANDARD ANSI/ISEA 107:2020

The minimum bursting strength shall be 178 N (18.1 kgf; 40 lbf).

PASS

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RESULTS

MEANING OF COLOUR FASTNESS APPRAISAL EVALUATED WITH GREY SCALE

VALUE	MEANING
5	VERY GOOD-EXCELLENT
4	GOOD
3	FAIR-MODERATE
2	POOR BEHAVIOUR
1	VERY POOR

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Lucia Martinez
Head of PPE and Ballistics department

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