TEST REPORT

2021CN0487

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 Orange

TESTS CARRIED OUT

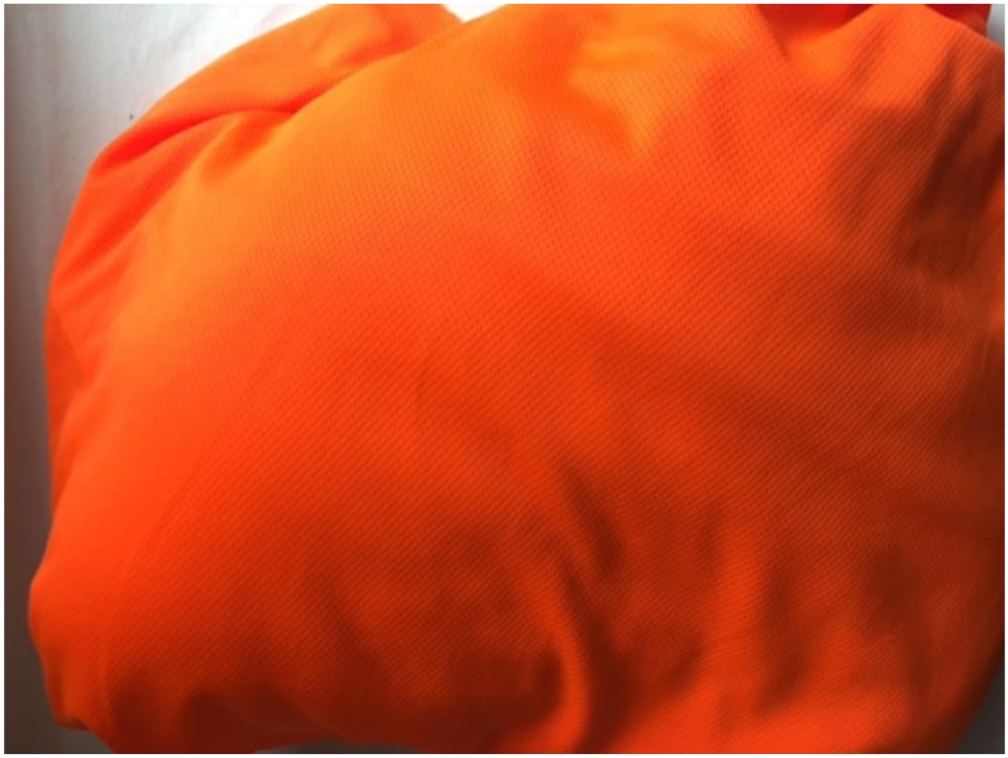
- PHOTOGRAPHY.
- DETERMINATION OF COORDINATES (X,Y,Y).
- COLOUR FASTNESS TO RUBBING.
- COLOUR FASTNESS TO PERSPIRATION.
- COLOUR FASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING.
- PRE-TREATMENT FOR DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING.
- DETERMINATION OF DIMENSIONAL CHANGE IN DOMESTIC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

AITEX - Plaza Emilio Sala, 1 - E-03801 ALCOY (Alicante) SPAIN Tel.:+34 96 554 22 00 www.aitex.es info@aitex.es

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

RESULTS

PHOTOGRAPHY



Reference [1]
BIRDEYE FABRIC

_____///

RESULTADOS / *RESULTS*

DETERMINATION OF COORDINATES (X,Y,Y)

Standard
ASTM E1164–12

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

Illuminant
D_{65}

Observant
2º

Measuring geometry
45/0

Specular component and UV filter
Excluded

Observation area
Small

Conditioning of samples

Initiation date	28/05/2021	**End date**	31/05/2021
Temperature	(20 ± 2) ºC	**Humidity**	(65 ± 5) %

Test date

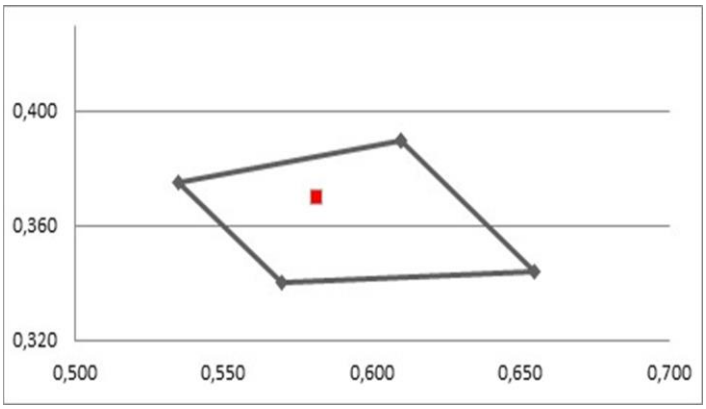
Initiation date	31/05/2021	**End date**	31/05/2021

Number of measurements
5

>>>

RESULTADOS / *RESULTS*

Reference
BIRDEYE FABRIC



Reference	x	y	Y minimum
♦ **Coordinate 1**	0,610	0,390	0,40
♦ **Coordinate 2**	0,535	0,375	
♦ **Coordinate 3**	0,570	0,340	
♦ **Coordinate 4**	0,655	0,344	
■ **BIRDEYE FABRIC (Original)**	0,582	0,370	0,44
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 0,40 specified in the Standard ANSI ISEA 107:2020 point (8.1).

PASS

_____///

RESULTADOS / *RESULTS*

DETERMINATION OF COORDINATES (X,Y,Y)

Standard
EN ISO 105 J01:1999

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

Illuminant
D_{65}

Observant
2º

Measuring geometry
45/0

Specular component and UV filter
Excluded

Observation area
Small

Conditioning of samples

Initiation date	04/06/2021	**End date**	08/06/2021
Temperature	(20 ± 2) ºC	**Humidity**	(65 ± 5) %

Test date

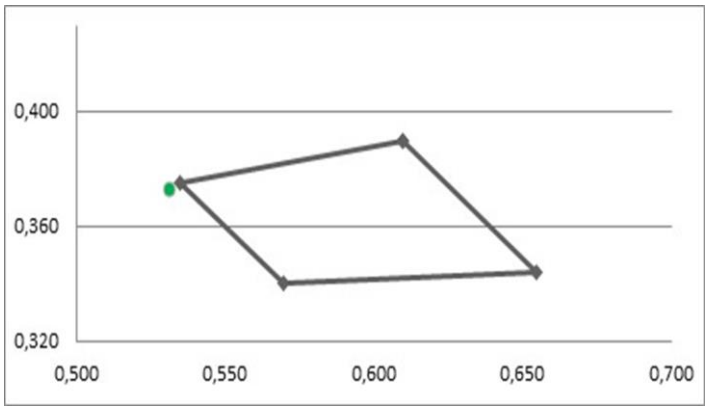
Initiation date	08/06/2021	**End date**	08/06/2021

Number of measurements
5

>>>

RESULTADOS / *RESULTS*

Reference
BIRDEYE FABRIC



Reference	x	y	Y minimum
♦ Coordinate 1	0,610	0,390	0,40
♦ Coordinate 2	0,535	0,375	
♦ Coordinate 3	0,570	0,340	
♦ Coordinate 4	0,655	0,344	
● BIRDEYE FABRIC (After exposure to Xenon light)	0,532	0,373	0,47
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 0,40 specified in the Standard ANSI ISEA 107:2020 point (8.1).

NO PASS

_____///

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

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	4	4-5	4

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

RESULTS

COLOUR FASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING

Standard
AATCC TM61-2013

Apparatus
Gyrowash

Test number
2A

Temperature
40 ºC

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

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
13373I12

Washing cycles
5

Washing procedure
III

Dryer machine
Whirlpool 13098I12

Drying procedure
Aiii

Washing powder
AATCC 1993 WOB

Start and finish date
04/06/2021 - 07/06/2021

RESULTS

DETERMINATION OF DIMENSIONAL CHANGE IN DOMESTIC WASHING AND DRYING

Standard
AATCC 135:2018

Machine cycle
3

Washing temperature
III 41ºC ± 3ºC

Washing machine
13373I12

Drying procedure
Aiii

Temperature drying
65 ºC

Dryer machine
13098I12

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	-2,2 %
		Crosswise	-0,9 %

REMARK
Negative dimensional change indicates shrinkage
Positive dimensional change indicates lengthening

>>>

RESULTS

Requisite

In accordance with the Standard ANSI/ISEA 107:2020 point (8.3.1), the dimensional change shall not exceed ± 7% in lengthwise and ± 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.** 118 **2.** 114 **3.** 106 **4.** 115 **5.** 112	**113**

REQUISITE ACCORDING TO STANDARD ANSI/ISEA 107:2020

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

PASS

>>>

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

_____///

Lucia Martinez
Head of PPE and Ballistics department

Digitally signed by ISABEL LLOPIS LUMBRERAS - NIF:21678551Q
Date: 2021.06.16 11:10:31 +02:00
Reason: Autorizado
Location: Alcoy

LIABILITY CLAUSES

1.- AITEX is liable only for the results of the methods of analysis used, as expressed in the report and referring exclusively to the materials or samples indicated in the same which are in its possession, the professional and legal liability of the Centre being limited to these. Unless otherwise stated, the samples were freely chosen and sent by the applicant.
2.- AITEX shall not be liable in any case of misuse of the test materials nor for undue interpretation or use of this document
3.- The Offer and / or Order to which the applicant gives approval through signature and seal, constitutes the Legally Executable Agreement in which AITEX is responsible for safeguarding and guaranteeing the absolute confidentiality of the management of all the information obtained or created during the performance of the contracted activities.
4.- In the eventuality of discrepancies between reports, a check to settle the same will be carried out in the head offices of AITEX. Also, the applicants undertake to notify AITEX of any complaint received by them as a result of the report, exempting this Centre from all liability if such is not done, the periods of conservation of the samples being taken into account.
5.- AITEX will provide at the request of the person concerned, the treatment of complaints procedure. In the event that you want to make it, direct it to: calidad@aitex.es.
6.- AITEX is not responsible for the information provided by customers, which is reflected in the Report, and may affect the validity of the results.
7.- AITEX is not responsible for an inadequate state of the sample received that could compromise the validity of the results, expressing such circumstance, in the test reports.
8.- AITEX may include in its reports, analyses, results, etc., any other evaluation which it considers necessary, even when it has not been specifically requested.
9.- When a Declaration of Conformity is requested, if not indicated otherwise, the decision rule will be applied according to ILAC-G8 & ISO 10576-1, in case of ambiguity, or indeterminacy
10.- The uncertainties of tests, which are made explicit in the Results Report, have been estimated for a k = 2 (95% probability of coverage). If not informed, they are available to the client in AITEX.
11. - The original materials and rests of samples, not subject to test, will be retained in AITEX during the twelve months following the issuance of the report, so that any check or claim which, in his case, wanted to make the applicant, should be exercised within the period indicated.
12.- This report may only be sent or delivered by hand to the applicant or to a person duly authorised by the same.
13.- The results of the tests and the statement of compliance with the specification in this report refer only to the test sample as it has been analyzed / tested and not the sample / item which has taken the test sample.
14.- The client must attend at all times, to the dates of the realization of the tests.
15.- According to Resolution EA (33) 31, the test reports must include the unique identification of the sample, and any brand or label of the manufacturer may be added. It is not allowed to re-issue test reports of untested sample names (references), they can only be re-issued for error correction or inclusion of omitted data that were already available at the time of the test. The laboratory can not assume responsibility for declaring that the product with the new trade name / trademark is strictly identical to the one originally tested; This responsibility belongs to the client.
16.- This report may not be partially reproduced without the written approval of the issuing laboratory.