

TEST REPORT

2021CN0481

DATE OF RECEPTION

27/05/2021

DATE TESTS

Starting: 27/05/2021

Ending: 11/06/2021

APPLICANT

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

IDENTIFICATION AND DESCRIPTION OF SAMPLES

REFERENCES

FLEECE FABRIC

According to the information supplied by the customer:

Fabric reference: Fleece 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.

1 / 13

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⁾
Fleece Fabric

///



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**

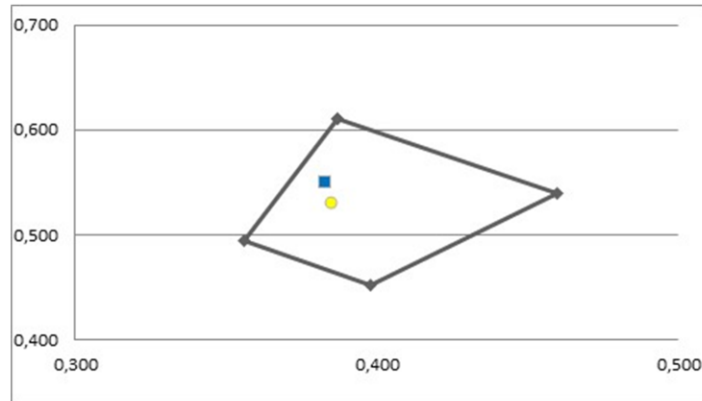
5

>>>



RESULTS

Reference Fleece 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	
■ Fleece Fabric (Original)	0,383	0,549	1,03
● Fleece Fabric (After exposure to Xenon light)	0,385	0,530	0,95
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

///



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
Fleece Fabric	4-5	4-5

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	Fleece 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 °C

Steel balls

50

Detergent

Standardized 1993 AATCC WOB detergent

Test piece drying in forced-air circulation dryer

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

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 41°C ± 3°C

Washing machine

13373112

Drying procedure

Aiii

Temperature drying

65 °C

Dryer machine

13098112

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 (%)
Fleece Fabric	3	Lengthwise	-2,2 %
		Crosswise	-1,5 %

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 $\pm 7\%$ 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)	
FLEECE FABRIC	1.	200
	2.	205
	3.	190
	4.	194
	5.	204
		199

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

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.