

2024CN0978

TEST REPORT

DATE OF RECEPTION

Date Format: dd/MM/yyyy 19/08/2024

DATE OF TESTS

Starting : 04/09/2024

Ending: 17/09/2024

APPLICANT

KUNSHAN SUNSHINETEX NEW MATERIAL Co. Ltd.

No. 417 Sanxiang Road Industry Zone

CN-215300 Kunshan

JIANGSU

China

REFERENCE OF SAMPLES

Reference by AITEX	Reference by customer	AITEX sample description
2024CN0798-S01	POBFD3XY	Fabric

TESTS CARRIED OUT

- PRE-TREATMENT FOR DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING
- LIMITED FLAME SPREAD
- DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING
- DETERMINATION OF BEHAVIOUR ON EXPOSURE TO A SOURCE OF RADIANT HEAT
- DETERMINATION OF MASS PER UNIT AREA USING SMALL SAMPLES
- DETERMINATION OF BEHAVIOUR OF MATERIALS ON IMPACT OF SPLASHES OF MOLTEN METAL
- ELECTROSTATIC PROPERTIES: MEASUREMENT OF ELECTRICAL RESISTANCE THROUGH A MATERIAL (VERTICAL RESISTANCE)

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





DESCRIPTION OF SAMPLES



Reference by AITEX: 2024CN0798-S01

Reference by customer:

POBFD3XY

AITEX sample description:

Fabric

Information supplied by the customer

0.8% Polyamide,32.9% cotton, 48.2% modacrylic, 18.1% polyester

Weight: 380gsm

Color: Grey/Navy/Black/HV-yellow/HV-orange

AITEX Subsamples		Subsample Description	
2024CN0798-S01_P1		POBFD3XY Fabric After 5 cycles	



EXECUTIVE SUMMARY

EN ISO 11611:2015	Reference	Test/Standard	Result
	2024CN0798-S01_P1	DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING EN ISO 5077:2008	PASS
		DETERMINATION OF BEHAVIOUR ON EXPOSURE TO A SOURCE OF RADIANT HEAT EN ISO 6942:2022	CLASS 2
		DETERMINATION OF MASS PER UNIT AREA USING SMALL SAMPLES EN 12127:1997 Pto.8.3	TESTED
		DETERMINATION OF BEHAVIOUR OF MATERIALS ON IMPACT OF SPLASHES OF MOLTEN METAL ISO 9150:1988	CLASS 2
		ELECTROSTATIC PROPERTIES: MEASUREMENT OF ELECTRICAL RESISTANCE THROUGH A MATERIAL (VERTICAL RESISTANCE) EN 1149-2:1997	PASS
	2024CN0798-S01+ 2024CN0798-S01_P1	LIMITED FLAME SPREAD EN ISO 15025:2016 Met.A	A1



REQUIREMENT SUMMARY

LIMITED FLAME SPREAD

REQUIREMENT ACCORDING EN ISO 11611:2015

- No specimen shall permit any part of the lowest boundary of any flame to reach the upper or either vertical edge
- No specimen shall give flaming or molten debris
- The afterglow time of each sample shall be ≤ 2 s. Any afterglow shall not spread from the carbonised area to the undamaged area after the cessation of flaming.
- For Method A, no specimen shall give hole formation of 5 mm or greater in any direction.
- The after flame time of each sample shall be ≤ 2 s

DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING

REQUIREMENT ACCORDING EN ISO 11611:2015

The dimensional change shall not exceed $\pm 3\%$, both in width warp and in length weft.

The dimensional change of knitted fabrics shall not exceed $\pm 5\%$, both in width Crosswise and in length Lengthwise.

ELECTROSTATIC PROPERTIES: MEASUREMENT OF ELECTRICAL RESISTANCE THROUGH A MATERIAL (VERTICAL RESISTANCE)

REQUIREMENT ACCORDING EN ISO 11611:2015

Vertical electric resistance, must be higher than $1,0 \cdot 10^5 \Omega$.

DETERMINATION OF BEHAVIOUR ON EXPOSURE TO A SOURCE OF RADIANT HEAT

REQUIREMENT ACCORDING EN ISO 11611:2015

Heat transfer index	Class 1	Class 2
RHTI 24	≥ 7	≥ 16

DETERMINATION OF BEHAVIOUR OF MATERIALS ON IMPACT OF SPLASHES OF MOLTEN METAL

REQUIREMENT ACCORDING EN ISO 11611:2015

Class 1	Class 2
Minimum 15 drops	Minimum 25 drops



RESULTS

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

Standard

EN ISO 6330:2021

Test date

Start date04/09/2024End date05/09/2024

Washing procedure

6N

Washing temperature

60°C

Washing cycles

5

Dryer type

James Heal

Drying procedure

F (type A1 tumble drying)

Washing powder

Reference detergent 3

Reference

2024CN0798-S01

Units	Dry mass of the samples(Kg)	Counterweight mass(Kg)	Counterweight type	Equipment
1	1.8	0.2	Type III	WASCATOR
2	1.3	0.7	Type III	WASCATOR
3	1.75	0.25	Type III	WASCATOR
4	1.3	0.7	Type III	WASCATOR

Reference	Description
2024CN0798-S01	POBFD3XY



RESULTS

LIMITED FLAME SPREAD

Standard

EN ISO 15025:2016 Met.A

Equipment

Equipment for determination of limited flame spread

Test date

Start date	11/09/2024	End date	13/09/2024
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Conditioned date

Start date	3/9/2024	End date	9/9/2024
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Conditioned

24h in indoor ambient conditions at (20 ± 2) °C and (65 ± 5) % RH

Gas used

Propane gas

Face exposed to the flame

Outer

**Reference**

2024CN0798-S01

Atmosphere for testing**Temperature**

22.2 °C

Relative Humidity

46.6 %

Direction	Warp			Weft		
Flaming to top or either side edge	NO	NO	NO	NO	NO	NO
Post- After flame (s)	0	0	0	0	0	0
Afterglow time (s)	0	0	0	0	0	0
Melting	NO	NO	NO	NO	NO	NO
Loose waste	NO	NO	NO	NO	NO	NO
Inflammation of the filter paper detached from waste	NO	NO	NO	NO	NO	NO
Hole formation	NO	NO	NO	NO	NO	NO

Reference

2024CN0798-S01_P1

Atmosphere for testing**Temperature**

21.1 °C

Relative Humidity

59.2 %

Direction	Warp			Weft		
Flaming to top or either side edge	NO	NO	NO	NO	NO	NO
Post- After flame (s)	0	0	0	0	0	0
Afterglow time (s)	0	0	0	0	0	0
Melting	NO	NO	NO	NO	NO	NO
Loose waste	NO	NO	NO	NO	NO	NO
Inflammation of the filter paper detached from waste	NO	NO	NO	NO	NO	NO
Hole formation	NO	NO	NO	NO	NO	NO

UncertaintyThe uncertainty of the assay of limited flame spread is $\pm 2\%$ of the value measured

Reference	Description
2024CN0798-S01	POBFD3XY
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



RESULTS

DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING

Standard

EN ISO 5077:2008

Preparation, marking and measuring of fabric specimens according to EN ISO 3759:2011

Start date04/09/2024End date10/09/2024

Equipment

Wascator type A-Horizontal drum, front loading

Washing cycles

5

Uncertainty

± 0.4 %

Reference

2024CN0798-S01_P1

Specimen	Direction	Dimensional change (%)
1	WARP	-2.0
	WEFT	-1.0

Note

Positive dimensional change indicates lengthening. Negative dimensional change indicates shrinkage

Reference	Description
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



RESULTS

DETERMINATION OF BEHAVIOUR ON EXPOSURE TO A SOURCE OF RADIANT HEAT

Standard

EN ISO 6942:2022

Equipment

Equipment for the determination of radiant heat

Conditioned

24h in indoor ambient conditions at (20 ± 2) °C and (65 ± 5) % RH

Ambient test conditions

22 °C and 49.5 % RH

Test date

Start date11/09/2024End date13/09/2024

Reference

2024CN0798-S01_P1

Heat flux density

19.91 kW/m²

Specimen	TF(%)	Heat transfer index RHTI 12 (s)	Heat transfer index RHTI24	(RHTI 24 - RHTI 12) (s)
1	31.9	17.0	27.4	10.4
2	31.9	16.8	27.2	10.4
3	32.3	17.1	27.4	10.3
Average	32.0	17.0	27.3	10.3
Result	31.9	16.8	27.2	10.4

Uncertainty

The uncertainty of the assay of Radiant heat is ±3% of the value measured

Reference	Description
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



RESULTS

DETERMINATION OF MASS PER UNIT AREA USING SMALL SAMPLES

Standard

EN 12127:1997 Pto.8.3

Conditioned date

Start date10/9/2024End date11/9/2024

Atmosphere for conditioning

Temperature(20 ± 2) °CRelative Humidity(65 ± 4) %

Test date

Start date10/09/2024End date11/09/2024

Reference

2024CN0798-S01_P1

Atmosphere for testing

Temperature(20.0± 2) °CRelative Humidity(65.0 ± 4) %

Mass per unit area (g/m²)	C.V. (%)
429	0.9

Reference	Description
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



RESULTS

DETERMINATION OF BEHAVIOUR OF MATERIALS ON IMPACT OF SPLASHES OF MOLTEN METAL

Standard

ISO 9150:1988

Equipment

Equipment for small molten metal splashes

Test date**Start date**

11/09/2024

End date

17/09/2024

Conditioned24h in indoor ambient conditions at $(20 \pm 2) ^\circ\text{C}$ and $(65 \pm 5) \% \text{ RH}$ **Reference**

2024CN0798-S01_P1

Specimen	N° of drops
1	>45
2	>45
3	>45
4	>45
5	>45
6	>45
7	>45
8	>45
9	>45
10	>45
Classification value	>45
Average	>45

Uncertainty $\pm 7\%$ of the value measured

Reference	Description
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



RESULTS

ELECTROSTATIC PROPERTIES: MEASUREMENT OF ELECTRICAL RESISTANCE THROUGH A MATERIAL (VERTICAL RESISTANCE)

Standard

EN 1149-2:1997

Atmosphere for conditioning

Temperature (20 ± 2) °C Relative Humidity (85 ± 5) %

Contact pressure

2.25 kPa

Potential applied

(100 ± 5) V

Current measurement after

(15 ± 1) s

Uncertainty

±20% of the obtained value

Reference

2024CN0798-S01_P1

Test date

Start date 11/09/2024 End date 12/09/2024

Atmosphere for testing

Temperature 20 °C Relative Humidity 85.3 %

Specimen	Vertical resistance (Ohm)
1	1.89·10 ⁷
2	4.63·10 ⁷
3	4.01·10 ⁷
4	1.50·10 ⁸
5	9.34·10 ⁷
Classification value	1.89·10 ⁷
Average (Ohm)	6.97·10 ⁷

Reference	Description
2024CN0798-S01_P1	POBFD3XY Fabric After 5 cycles



Lucia Martinez
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