QIMA
YOUR EYES IN THE SUPPLY CHAIN

TEST REPORT

Test Report #	22W-005418	Date of Report Issue:	May 6, 2022
Date of Sample Received:	April 20, 2022	Pages:	Page 1 of 11

CLIENT INFORMATION:

Company:	Koyo Orient Japan Co., Ltd.
Address:	2-3-2 Azumacho, Ageo, Saitama, Japan Postal: 362-0031

SAMPLE INFORMATION:

Product Name:	Musou Black Fabric FR		
Style No.:	-	Labeled Age Grade:	-
Order No.(PO No.):	-	Client Request Age Grade:	-
Country of Origin:	Japan	Recommended Age Grade:	-
Country of Distribution:	-	Tested Age Grade:	-
Color/Assortment:	Black		
Composition/Main Material:	Rayon and Cupro		
End Use:	Curtain and Wallpaper		
Buyer Name:	Koyo Orient Japan Co.,Ltd.		
Supplier Name:	Koyo Orient Japan Co.,Ltd.		
Factory Name:	Koyo Orient Japan Co.,Ltd.		
Testing Period:	04/21/2022-05/06/2022		

OVERALL RESULT: **PASS**

Please refer to the following pages for test result summary and appropriate notes.

QIMA (HANGZHOU) TESTING CO., LTD.

Thetis Tang

Thetis Tang
Textile Laboratory Supervisor

TEST RESULTS SUMMARY:

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	SOR/2016-194 and Method F01 Flammability of Textile Products
PASS	NFPA 701:2019 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films$^{\phi}$
PASS	EN 13773:2003 Textiles and Textile Products - Burning Behaviour - Curtains and Drapes - Classification Scheme$^{\phi}$

DETAILED RESULTS:

SOR/2016-194 and Method F01 Flammability of Textile Products

Test Method: CAN/CGSB-4.2 No.27.5-2008

Specimen No.	1				
Preliminary Tests	Fabric Surface	Raised	Test Specimen Direction		Face Length
Items	Result				Client's requirement
	As Received		**After Dry-cleaning and Laundering***		
	Flame Spread (sec.)	Burn Code	Flame Spread (sec.)	Burn Code	
(1)	-	DNI	-	DNI	>4s
(2)	-	DNI	-	DNI	
(3)	-	DNI	-	DNI	
(4)	-	DNI	-	DNI	
(5)	-	DNI	-	DNI	
(6)	-	DNI	-	DNI	
(7)	-	DNI	-	DNI	
(8)	-	DNI	-	DNI	
(9)	-	DNI	-	DNI	
(10)	-	DNI	-	DNI	
Conclusion	PASS				

* Dry-cleaning / Laundering procedure is according to CAN/CGSB-4.2 No.30.3-94 & CAN/CGSB-4.2 No.58-2004; Machine wash at 50℃ and tumble dry on the normal setting.

Burn Code Description:

DNI = Did not ignite;

DETAILED RESULTS:

NFPA 701:2019 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

Test Method: NFPA 701:2019 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, test method 1.

Conditioning and cleaning procedure:

Cleansing Procedure: None.

Prior to testing, the sample was dried in oven at 105℃±3℃ for 30 minutes.

Exposed surface: Front surface

Specimen No.	1				
Items	Result				
	Mass before test (g)	Mass after test (g)	Mass loss (%)	After flame time (s)	Burning time on floor (s)
(1)	17.96	14.46	19.49	0	0
(2)	17.68	14.05	20.53	0	0
(3)	18.18	14.11	22.39	0	0
(4)	17.14	14.38	16.10	0	0
(5)	17.41	14.41	17.23	0	0
(6)	17.56	14.38	18.11	0	0
(7)	17.25	14.22	17.57	0	0
(8)	17.69	14.76	16.56	0	0
(9)	18.05	14.51	19.61	0	0
(10)	17.82	14.69	17.56	0	0
Average.	17.67	14.40	18.52	0	0

Remark: SD =1.96 3SD =5.88 Mean + 3SD =24.40

SD – Standards deviation

Observations

Vigorousness of burning (Yes / No)	No
Material molten dripping (Yes / No)	No
Odor smoke (Yes / No)	Yes

Criteria for test method 1 (Chapter 10):

1.Fragments or residues of specimens that fall to the floor of the test chamber shall not continue to burn for more than an average of 2 seconds per specimen for the sample of 10 specimens.

2. The average weight loss of the 10 specimens in a sample shall be 40 percent or less

3. No individual specimen's percent mass loss shall deviate more than 3 standard deviations from the mean for the 10 specimens

4. When a retest is required, no individual specimen's percent mass loss in the second set of specimens shall deviate from the mean value by more than 3 standard deviations calculated for the second set.

5. When a sample does not demonstrate passing performance in accordance with all of the conditions indicated above, the material shall be recorded as having failed Test Method 1

Conclusion: The tested sample "As received" **meets** the requirements of NFPA 701:2019, test method 1

Statement: This declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

DETAILED RESULTS:

EN 13773:2003 Textiles and Textile Products - Burning Behaviour - Curtains and Drapes - Classification Scheme ♦

Test Method: EN 1101:1995+A1:2005 Textiles and textile products - Burning behaviour - Curtains and drapes - Detailed procedure to determine the ignitability of vertically oriented specimen (small flame) and EN 13772:2011 textiles and textile products-burning behaviour – curtains and drapes – measurement of flame spread of vertically oriented specimens with large ignition source, classification according to EN 13773:2003.

Conditioning and cleaning procedure:
Cleansing Procedure: None.
Conditioning: Prior to testing, the specimens were conditioned at least 24 h in an atmosphere having a temperature of 20±2°C and a relative humidity of 65±5%.
At time of testing: Temperature between 10°C ~ 30°C and Relative humidity between 15% ~ 80%

a) EN 1101:1995+A1:2005 (Test method: EN ISO 6940:1995, Edge ignition)

Specimen No.			1			
Items	Result					
	Ignition time (s)		After flame time (s)		Reaches the top or vertical edges (Yes/No)	
	Lengthwise	Widthwise	Lengthwise	Widthwise	Lengthwise	Widthwise
(1)	1	1	0	0	No	No
(2)	2	2	0	0	No	No
(3)	3	3	0	0	No	No
(4)	4	4	0	0	No	No
(5)	5	5	0	0	No	No
(6)	10	10	0	0	No	No
(7)	15	15	0	0	No	No
(8)	20	20	0	0	No	No

Comment: Non-ignition

b) EN 13772:2011 (flame applied time, 10 s; Bottom edge ignition)

Lengthwise: Preliminary test to indicate the worst result (if applicable)

Specimen No.	1	
Items	Result (1#)	
	Face (One side of specimen)	Back (Other side of specimen)
First thread is severed (Yes (specified time, s) /No)	No	No
Third thread is severed (Yes (specified time, s) /No)	No	No
Damaged length (mm)	75	74
Flaming debris (Yes/No)	No	No
Non-Flaming debris (Yes/No)	No	No

Base on the Preliminary test with indicating the worst result and test the other two specimens in the same way which gave the worst results.
The following test for other two specimens (Face)

Specimen No.	1	
Items	Result	
	2#	3#
First thread is severed (Yes (specified time, s) /No)	No	No
Third thread is severed (Yes (specified time, s) /No)	No	No
Damaged length (mm)	77	75
Flaming debris (Yes/No)	No	No
Non-Flaming debris (Yes/No)	No	No

Comment: The 1st marker threads not severed and no flaming debris.

Widthwise: Preliminary test to indicate the worst result (if applicable)

Specimen No.	1	
Items	Result (1#)	
	Face (One side of specimen)	Back (Other side of specimen)
First thread is severed (Yes (specified time, s) /No)	No	No
Third thread is severed (Yes (specified time, s) /No)	No	No
Damaged length (mm)	78	76
Flaming debris (Yes/No)	No	No
Non-Flaming debris (Yes/No)	No	No

Base on the Preliminary test with indicating the worst result and test the other two specimens in the same way which gave the worst results
The following test for other two specimens (Face)

Specimen No.	1	
Items	Result	
	2#	3#
First thread is severed (Yes (specified time, s) /No)	No	No
Third thread is severed (Yes (specified time, s) /No)	No	No
Damaged length (mm)	80	78
Flaming debris (Yes/No)	No	No
Non-Flaming debris (Yes/No)	No	No

Comment: The 1st marker threads not severed and no flaming debris.

Additional Information for reference:

(1) Class definitions

Class	Ignitability	Flame spread
1	Non ignition according to EN 1101	1st marker threads not severed, no flaming debris, according to EN 13772
2	Non ignition according to EN 1101	3rd marker threads not severed, no flaming debris, according to EN 13772
3	Non ignition according to EN 1101	3rd marker threads severed, and/or flaming debris, according to EN 13772
4	Ignition according to EN 1101	3rd marker threads not severed, no flaming debris, according to EN 1102
5	Ignition according to EN 1101	3rd marker threads severed, and/or flaming debris,

(2) Criteria for class allocation

Class allocation according to class number is given hereafter:

1. If at least two specimens (out of six) give a result (severing the marker thread and/or flaming debris) belonging to a higher number class the material shall be given in this higher class.
2. If only one specimen (out of six) gives a result (severing the marker thread or flaming debris) belonging to a higher number class, 3 new extra specimens shall be tested in the same direction as the one giving the worst result
3. If none of these new specimens gives a result belonging to the higher number class the material shall be classified in the lower number class
4. If at least one of the extra specimens tested gives a result belonging to the higher number class the material shall be given this class.

Conclusion: The test sample "As Received" **meets** the requirements of Class 1 specified in EN 13773:2003.

Statement: This declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Black fabric	-

SAMPLE PHOTO:

-End Report-