



Applicant : Manual Woodworkers and Weavers Inc.

Date : Oct 31, 2023

Attn : Larry Bradley

Sample Description As Declared :

No. Of Sample : One
Fibre Content : 100% Polyester
Material : Knitted Throw
Finishing : Without Flame Retardant
End Uses : Throw
Colour : White
Style No. : 25830 - Sherpa
Order No./PO No. : 16585815
Buyer's Name : -
Agent's Name : -
Manufacturer's Name : -

Applicant's Provided Care Instruction/Label :

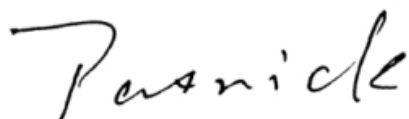
Nachine Wash Separately In Cold Water
Delicate Cycle
Do Not Bleach
Tumble Dry, Low Heat Setting
Do Not Iron Or Press W/Heat
Do Not Dry Clean

Date Received/Date Test Started : Oct 25, 2023

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Page(S)

Authorized By :
For Intertek Testing Services
(Tianjin) Ltd.



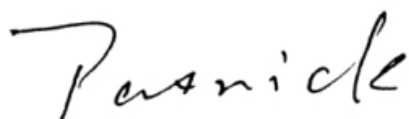
Patrick Gong
General Manager

Conclusion:

<u>Tested Sample/Component</u>	<u>Test Item</u>	<u>Result</u>
(1)	Azocolourants Content Requirement in Annex XVII Item 43 and 72 of the REACH Regulation (EC) No. 1907/2006 & Its Amendments	Pass
	Organotin Content Requirement In Annex XVII Item 20 of The REACH Regulation (EC) No. 1907/2006 & Amendment (EU) No. 276/2010 (Formerly Known As Decision 2009/425/EC)	Pass
(2)	U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 For Total Lead Content In Non-Surface Coating Materials (Substrate)	Pass
Submitted Sample	Total Lead (Pb) Content In Surface Coating	Not Applicable
(2)	Total Cadmium (Cd) Content in Non-Surface Coating Materials (Substrate)	Pass
Submitted Sample	Total Cadmium (Cd) Content In Surface Coating	Not Applicable
(2)	16 CFR part 1307 approved by U.S. Consumer Product Safety Commission (CPSC) for prohibition of children's toys and child care articles containing specified phthalates	See Comment

Comment: The Testing Scope Of The Standard Was Not Applicable To The Submitted Samples. However, The Test Results Of Tested Component (2) Did Not Exceed The Limits Of The Standard.

Authorized By :
For Intertek Testing Services
(Tianjin) Ltd.



Patrick Gong
General Manager

Conclusion:

Fibre Identification	*
pH Value	#
Formaldehyde Spot Test	#
Appearance After Wash	F
Colour Fastness To Chlorine Bleach	F
Colour Fastness To Non-Chlorine Bleach	M
Resistance To Artificial Saliva And Sweat	M
Weight Per Unit Area	#
Flammability Test (ASTM D4151-18)	M1
Flammability Test (ISO 12952-2:2010, Match-flame Equivalent Test)	M2
Flammability Test - Textiles Flammability Regulations (SOR/2016-194) (CAN/CGSB-4.2 No.27.5-2023)	M3

Remark : M = Commercially Acceptable; F = Fail

*=The Fibre Label Of The Sample Should Be Rewritten As : " Face:100% Polyester
Back:100% Polyester".

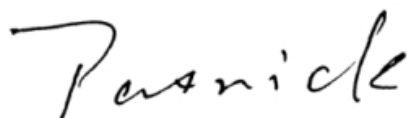
#=No Comment

M1=Based Upon The Test Results Of The Flammability Test Reported, The Sample Submitted For Testing Is Compiled With Class I Requirement As Prescribed In ASTM D4151 : 18.

M2= The Sample Meets ISO 12952-2:2010 Requirement In Flammability Test.

M3= Based Upon The Results Of Flammability Test Reported, The Sample Submitted For Testing Meets The Flammability Requirements Of The Canada's Textile Flammability Regulations (SOR/2016-194).

Authorized By :
For Intertek Testing Services
(Tianjin) Ltd.



Patrick Gong
General Manager

Tests Conducted:

1 Fibre Identification (AATCC TM20-2021) :

Face:100% Polyester	<u>Marked</u>
Back:100% Polyester	100% Polyester

2 pH Value (AATCC TM81-12) :

6.9

3 Formaldehyde Spot Test (AATCC TM94-1987e3(2017)e):

Negative

4 Appearance After Wash (AATCC Technical Supplement TS-008, Machine Wash At 80°F, Delicate Cycle, In Tide Detergent Solution, Followed By Tumble Dry Low):

After The One Wash

Pilling Rating:	3.5
Color Change Of The White Color	4.5
Cross Staining Onto The Multi-Fiber Fabric	
-Acetate	5.0
-Cotton	5.0
-Nylon	5.0
-Polyester	5.0
-Acrylic	5.0
-Wool	5.0

Observation :

Spirality	Not Applicable
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The General Appearance Of The Washed Sample Was Acceptable.

Tests Conducted :

Appearance After Wash(Cont'd)

After The Three Washes

Pilling Rating:	3.0
Color Change Of The White Color	4.5
Cross Staining Onto The Multi-Fiber Fabric	
-Acetate	5.0
-Cotton	5.0
-Nylon	5.0
-Polyester	5.0
-Acrylic	5.0
-Wool	5.0

Observation :

Spirality Not Applicable

The General Appearance Of The Washed Sample Was Unacceptable.

- 5 Colour Fastness To Chlorine Bleach (AATCC/ASTM TS-001, Spot With One Drop Of 16.67% Clorox Liquid Bleach Solution And Wait For One Minute Then Dry):

Colour Change 3.5

- 6 Colour Fastness To Non-Chlorine Bleach (AATCC/ASTM TS-001,(1) Soak With 1.88% Powder Clorox 2 For 1 Minute Then Rinse Well And Dry; (2) Spot With One Drop Of Liquid Clorox 2 And Wait For 5 Minutes then Rinse Well And Dry) :

Colour Change
Powder Clorox 2: 4.5
Liquid Clorox 2: 4.5

- 7 Resistance To Artificial Saliva And Sweat (DIN 53160-1/DIN 53160-2:2010) :

	<u>Solution 1</u> (Saliva)	<u>Solution 2</u> (Sweat)
Grade	4.5	4.5

- 8 Weight Per Unit Area (ASTM D3776/D3776M-20, Option C) :

446.9 g/m² (13.2 oz/yd²)

Tests Conducted :

9 Flammability Test (ASTM D4151-18) :

The Apparatus And Methods Of Testing Were Those Described In ASTM D4151-18, For Identify Blanket Fabric Which Ignite Easily And Propagate Flame Across The Surface.

The Specimens Cut From The Blanket Fabric, Five On The Face Side And Five On The Back Side, Are Prepared By Brushing If They Have A Raised Fibre Surface And By Drying, A 1-Second Flame Is Applied To The Surface Of Specimen And Burning, Charring Or Discoloration Of A Paper Monitor Is Noted.

Test Result:

Flame Application Time : 1.0 Second

As Received State:

Surface Ignition	Side One				
Specimen Number	1	2	3	4	5
Ignitions Causing The Paper Monitor To Burn, Char, Or Discolor	NO	NO	NO	NO	NO

Surface Ignition	Side Two				
Specimen Number	6	7	8	9	10
Ignitions Causing The Paper Monitor To Burn, Char, Or Discolor	NO	NO	NO	NO	NO

Classification : Class I

Remark : NO = Was Not Observed

Class I = If None Of The Paper Monitors Burn, Char, Or Become Discolored After Exposing The Specimens To The Ignition Source.

Class II = If One Or More Of The Paper Monitors Burn, Char, Or Become Discolored After Exposing The Specimens To The Ignition Source.

Tests Conducted :

10 Flammability Test (ISO 12952-2:2010, Match-flame Equivalent Test) :

The Apparatus And Method Of Testing Were Those Described In ISO 12952-2:2010. Test Carried Out For Assessing The Ignitability Of Bedding Item When Subjected To Match-Flame Equivalent.

The Following Test Results Relate Only To The Ignitability Of The Tested Bedding Item Under The Particular Test Conditions; They Are Not Intended As A Means Of Assessing The Full Potential Fire Hazard Of The Item In Use.

Test Result : Non-Ignition (NI)

Progressive Smouldering Ignition

	<u>Observation</u>
(A) Any test specimen that displays escalating combustion behaviour, making it unsafe to continue the test, and that requires forcible extinction.	No
(B) Any test specimen that smoulders until it is consumed, within a period of 15 min following the removal of the ignition source.	No
(C) Any test specimen that produces externally detectable amounts of smoke, heat or glowing, after a period of 15 min following the removal of the ignition source.	No
(D) Any test specimen that, on final examination, shows evidence of active smouldering	No

Flaming Ignition

	<u>Observation</u>
(A) Any test specimen that displays escalating combustion behaviour, making it unsafe to continue the test, and that requires forcible extinction.	No
(B) Any test specimen that burns until it is consumed within the test duration.	No
(C) Any test specimen that continues to flame for more than 120 s after removal of the ignition source.	No

Test No.	Time To Extinction After Placement Of Ignition Source			
	Flame		Smoke	
	Min	Sec	Min	Sec
1	0	2	0	12
2	0	3	0	15
3	0	0	0	7
4	0	0	0	9

Tests Conducted :

Flammability Test(Cont'd)

Placement Of Match-flame Equivalent :

Test 1 - On Top Of The Upper Surface In The Length Direction

Test 2 - On Top Of The Upper Surface In The Width Direction

Test 3 - Between Top And Second Layer In The Length Direction

Test 4 - Between Top And Second Layer In The Width Direction

Washing condition : The sample was washed 5 times in accordance with ISO 6330:2000, Test Programme 8A, 30°C, Followed By Tumble Dry Low

Atmosphere for conditioning : The materials shall be conditioned immediately before the test for 72 hours in an atmosphere having a temperature of $23 \pm 2^\circ\text{C}$ and a relative humidity of $50 \pm 4\%$.

Remark : No = Was not observed

11 Flammability Test - Textiles Flammability Regulations (SOR/2016-194) (CAN/CGSB-4.2 No.27.5-2023):

The Apparatus And Methods Of Testing Were Those Described In Canadian General Standard Board Textile Test Method CAN/CGSB-4.2 No.27.5-2023.

<u>Original</u> (seconds)	<u>Requirement</u>
SF	> 7.0 seconds
SF	
SF	
SF	
SF	

Average :	-

Remark : SF = Surface Flash. Surface fibres of a specimen having a raised fibre surface are burned rapidly. The stop-thread is not burned and no flame spread time is recorded. No base burn occurs.

Tests Conducted :

12 Detection of Amines Derived from Azocolourants and Azodyes:

By Gas Chromatographic - Mass Spectrometric (GC-MS) Analysis.

Test Method: EN ISO 14362-1: 2017 for Textile Material

No.	Forbidden Amine	Cas No.	Result (mg/kg) Method D (1)
1.	4-Aminodiphenyl	92-67-1	ND
2.	Benzidine	92-87-5	ND
3.	4-Chloro-o-Toluidine	95-69-2	ND
4.	2-Naphthylamine	91-59-8	ND
5.	o-Aminoazotoluene	97-56-3	ND
6.	2-Amino-4-Nitrotoluene	99-55-8	ND
7.	p-Chloroaniline	106-47-8	ND
8.	2,4-Diaminoanisole	615-05-4	ND
9.	4,4'-Diaminodiphenylmethane	101-77-9	ND
10.	3,3'-Dichlorobenzidine	91-94-1	ND
11.	3,3'-Dimethoxybenzidine	119-90-4	ND
12.	3,3'-Dimethylbenzidine	119-93-7	ND
13.	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	ND
14.	p-Cresidine	120-71-8	ND
15.	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND
16.	4,4'-Oxydianiline	101-80-4	ND
17.	4,4'-Thiodianiline	139-65-1	ND
18.	o-Toluidine	95-53-4	ND
19.	2,4-Toluylenediamine	95-80-7	ND
20.	2,4,5-Trimethylaniline	137-17-7	ND
21.	2-Methoxyaniline	90-04-0	ND
22.	4-aminoazobenzene	60-09-3	ND
23.	4-chloro-o-toluidinium chloride (detection by 4-Chloro-o-toluidine)	3165-93-3	ND
24.	2-Naphthylammoniumacetate (detection by 2-Naphthylamine)	553-00-4	ND
25.	4-methoxy-m-phenylene diammonium sulphate (detection by 4-methyl-m-phenylenediamine)	39156-41-7	ND
26.	2,4,5-trimethylaniline hydrochloride (detection by 2,4,5-trimethylaniline)	21436-97-5	ND

Tests Conducted :

Detection of Amines Derived from Azocolourants and Azodyes(Cont'd)

Remark: ND = Not Detected
Detection Limit = 5 mg/kg
Requirement = 30 mg/kg

Method D: Colourant extraction with Xylene as per EN ISO 14362-1: 2017 Section 10.1

Tested Components:

(1) 100% Polyester White Knitted Main Fabric

13 Organotin Content:

By Solvent Extraction, Followed By Gas Chromatography Mass Spectrometric (GC/MS) Analysis.

(a) EEC Regulated Organotins

<u>Compound</u>	<u>Result (ppm) Of Tin</u> (1)	<u>Requirement</u> <u>ppm) Of Tin</u>
Tri-substituted Organotin@	ND	1000
Dibutyltin (DBT)	ND	1000
Diocetyl tin (DOT)	ND	1000

Remark : The Above Limit Was Quoted According To Annex XVII Items 20 Of The REACH Regulation (EC) No. 1907/2006 & Amendment (EU) No. 276/2010 (Formerly Known As Decision 2009/425/EC) For Organotin Content.

(b) Other Organotins

<u>Compound</u>	<u>Result (ppm) Of Tin</u> (1)
Monobutyltin (MBT)	ND
Monooctyltin (MOT)	ND
Tricyclohexyltin (TCyT)	ND
Tetrabutyltin (TeBT)	ND

Remark : ND = Not Detected

Detection limit = 0.0001% (W/W) Of Tin

@ = The reported value was calculated by summation of the values of Tri-butyltin, Tri-phenyltin, Tri-methyltin, Tri-octyltin, Tri-cyclohexyltin, Tripropyl Tin

Tested Component :

(1) 100% Polyester White Knitted Main Fabric

Tests Conducted :

14 Total Lead (Pb) Content In Non-Surface Coating(Substrate):

As Per U.S. Consumer Product Safety Improvement Act 2008 Title I, Section 101 For Total Lead Content In Non-Surface Coating Materials (Substrate), CPSC-CH-E1002-08.3:2012 (For Non-Metal), Acid Digestion Method Was Used And The Total Lead Content Was Determined By Inductively Coupled Argon Plasma Spectrometry.

<u>Tested Component</u>	<u>Result In ppm</u>	<u>Requirement In ppm</u>
(2)	<10	40

Remark : ppm = Parts Per Million = mg/kg
<=Less Than

Tested Components :

(2) White Woven Label With Black Printing Of Sample Use

15 Total Lead (Pb) Content In Surface Coating:

As Per Standard Operating Procedure For Determining Lead (Pb) In Paint And Other Similar Surface Coatings (April 26, 2009), Test Method CPSC-CH-E1003-09 Was Used And Total Lead Content Was Determined By Inductively Coupled Argon Plasma Spectrometry/Flame Atomic Absorption Spectrometry.

<u>Tested Sample</u>	<u>Result In ppm</u>	<u>Requirement In ppm</u>
	NA	40

Remark : ppm = Parts Per Million Based On Dry Weight Of Sample
N/A = Not Applicable

16 Total Cadmium (Cd) Content in Non-Surface Coating Materials (Substrate) :

With Reference to CPSC-CH-E1002-08.3 (for Non-metal), Determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP - OES).

<u>Tested Component</u>	<u>Result (ppm)</u>	<u>Requirement (ppm)</u>
(2)	ND	40

Remark: Detection Limit = 10 mg/kg
ND = Not Detected

Tested Components:

(2) White Woven Label With Black Printing Of Sample Use

Tests Conducted :

17 Total Cadmium (Cd) Content In Surface Coating:

As Per Standard Operating Procedure For Cadmium (Cd) In Paint And Other Similar Surface Coatings (April 26, 2009), Test Method CPSC-CH-E1003-09 Was Used And Total Cadmium Content Was Determined By Inductively Coupled Argon Plasma Spectrometry/Flame Atomic Absorption Spectrometry.

<u>Tested Sample</u>	<u>Result In ppm</u>	<u>Requirement In ppm</u>
	NA	40

Remark : ppm = Parts Per Million Based On Dry Weight Of Sample
N/A = Not Applicable

18 Phthalate Content:

With reference to CPSC-CH-C1001-09.4, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

<u>Test item</u>	<u>CAS No.</u>	<u>Result (%)</u>	<u>Limit (%) (Max.)</u>
		(2)	
Dibutyl phthalate (DBP)	84-74-2	ND	0.1
Di-(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ND	0.1
Benzyl butyl phthalate (BBP)	85-68-7	ND	0.1
Di-iso-nonyl phthalate (DINP)	28553-12-0	ND	0.1
Diisobutyl phthalate (DIBP)	84-69-5	ND	0.1
Di-n-pentyl phthalate (DPENP)	131-18-0	ND	0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	ND	0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	ND	0.1

The above limit was quoted according to 16 CFR part 1307 approved by U.S. Consumer Product Safety Commission (CPSC) for prohibition of children's toys and child care articles containing specified phthalates.

Remark : ND = Not Detected
Detection Limit = 0.01%

Tested Components:
(2) White Woven Label With Black Printing Of Sample Use

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