



## Test Report

No.: HKSL1403033399TX

Date: Mar 19, 2014

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AMERICAN RECREATION PRODUCTS LLC.  
ROOM 2501 - 2505 LEVER TECH CENTRE  
NO. 69-71 KING YIP STREET  
KWUN TONG  
,KOWLOON,HONG KONG

The following sample was submitted and identified by the client as:

One sample of woven 20d 100% nylon ripstop DTRNF012-3L cutting in ocean blue.

Buyer	:	Sierra Designs
Manufacturer	:	T&A
End Use	:	Rainwear
Country Of Origin	:	Taiwan
Country Of Destination	:	USA
Applicant's Proposed Care Instruction	:	Hand wash cold, do not bleach 60C tumble dry, do not iron
Sample Receiving Date	:	Mar 12, 2014
Test Performing Period	:	Mar 13, 2014 – Mar 19, 2014
Test Performed	:	Selected test(s) as requested by applicant against specified requirement (details please refer to result page(s)).
	:	* * * *
Test Results	:	Please refer to the next page(s).

Washed, residual & tested samples returned to applicant

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Conclusion	:	Dimensional Stability To Washing	#
		Tensile Strength	#
		Tearing Strength	#
		Pilling Resistance	#
		Taber Abrasion	#
		Abrasion Resistance	#
		Water Resistance (AATCC 35)	M
		Water Repellency	#
		Fabric Weight Per Unit Area	#
		Bonding Strength (AATCC 136)	#
		Bonding Strength (ASTM D2724)	#
		Water Resistance (JIS L1092 Method A)	#
		Water Resistance (JIS L1092 Method B)	#
		Flammability Test Of Clothing Textiles	#
		Water Vapour Transmission of Textile	#
		Fabrics	
		Water Vapour Permeability of Textiles	#

Remarks: M = Meet specified requirement  
# = See result

Signed for and on behalf of  
SGS Hong Kong Ltd.



Chau Shui King, Ginny  
Assistant Account Manager

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### Test Results :

#### Dimensional Stability To Washing

(AATCC-TS-006, hand wash at 80 degree F with 7.5g of 1993 AATCC Standard Reference Detergent, tumble dry delicate less than 140 degree F, do not iron)

#### Specified Requirement

##### After 1 wash

Lengthwise (%) -0.8  
Widthwise (%) -0.1

##### After 3 wash

Lengthwise (%) -1.5  
Widthwise (%) -0.8

Remarks : (+) Means extension  
(-) Means shrinkage

#### Tensile Strength (ASTM D5034-2009 – CRE – 1” grab)

#### Specified Requirement

Warp (lb) 76.1  
Weft (lb) 44.5

#### Tearing Strength (ASTM D1424-2009; Elmendorf)

#### Specified Requirement

Warp yarns torn (lb) 1.2  
Weft yarns torn (lb) 0.9

Remarks : Full scale range of pendulum for warp yarn testing is 3.6 lb.  
Full scale range of pendulum for weft yarn testing is 1.8 lb.

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**Pilling Resistance** (ASTM D3512/D3512M-2010e2; after 30 min. tumbling in Random Tumble Pilling Tester)

<u>As received</u>		<u>Specified Requirement</u>
Rating		
Specimen 1	5.0	/
Specimen 2	5.0	
Specimen 3	5.0	
Average	5.0	

Remarks : Pilling Rating  
5 No pilling  
4 Slight pilling  
3 Moderate pilling  
2 Severe pilling  
1 Very severe pilling

### **Taber Abrasion**

(ASTM D3884-2009, Taber (RPDH) Abrader CS-10 wheel, test option : Light duty-250g/wheel)

		<u>Specified Requirement</u>
End Point (cycles)	5000 (Yarn breakage)	/

### **Abrasion Resistance**

(ASTM D4966-1998(2007) Option 1; Martindale Wear & Abrasion Tester; 9 kPa Pressure)

		<u>Specified Requirement</u>
End point (cycles)	Exceed 20000	/

### **Water Resistance**

(Ref. AATCC 35-2006; Rain Test, 600mm head pressure, 2 minutes impact)

	<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>U.S. Custom's Requirement</u>
The weight of the blotter gained (g) :	0.0	0.0	0.0	1.0 g max.

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## Water Repellency

(AATCC 22-2010; Spray Test – Tested under controlled condition, water temperature: 27±1 °C)

	<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>Specified Requirement</u>
<u>As received</u> Rating	100	100	100	/
<u>After 10 wash</u> * Rating	80	80	80	

Remarks :

Nomenclature for rating :

- 100 – No sticking or wetting of the specimen face
- 90 – Slight random sticking or wetting of the specimen face
- 80 – Wetting of specimen face at spray points
- 70 – Partial wetting of the specimen face beyond the spray points
- 50 – Complete wetting of the entire specimen face beyond the spray points
- 0 – Complete wetting of the entire face of the specimen

\* (Washing procedure:AATCC-TS-006, hand wash at 80 degree F with 7.5g of 1993 AATCC Standard Reference Detergent, tumble dry & do not iron, delicate less than 140 degree F)

## Fabric Weight Per Unit Area (ASTM D3776-2009 Option C)

		<u>Specified Requirement</u>
(oz/sq.yd.)	1.81	/
(g/sq.m.)	61.5	

## Bonding Strength (AATCC 136-2003)

		<u>Specified Requirement</u>
Lengthwise (g/cm)	369.2	/
Widthwise (g/cm)	207.5	

## Bonding Strength (ASTM D2724-2007(2011))

		<u>Specified Requirement</u>
Lengthwise (oz/in)	33.1	/
Widthwise (oz/in)	18.6	

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### Water Resistance

(JIS L1092-2009 Method A; 60cm/ min; Low hydraulic pressure method)

Water column (mm) 9905  
Water column (cm) 990.5

Specified  
Requirement  
/

### Water Resistance

(JIS L1092-2009 Method B; 100kPa/min; High hydraulic pressure method )

Water column (mm) 13501.9  
Water column (kPa) 132.4

Specified  
Requirement  
/

### Flammability Test of Clothing Textiles

(16 CFR Part 1610-March 25, 2008 Edition)

As claimed by the Client, fabric which made entirely of nylon, thus the sample is exempt from flammability testing in accordance with: 16 CFR 1610.1(d) (2): Fabric which made entirely or in combination of acrylic, modacrylic, nylon, olefin, polyester, wool fibres

### Water Vapour Transmission of Textile Fabrics (ASTM E96/E96M-13)

Procedure BW - Inverted Water Method at 73.4 °F (23 °C) & 50±2% RH  
Tested Area : 0.003117 square meter  
Orientation : Coating facing water

Client's Specified Requirement

#### Result

Gram per square meter per 24 hours 5970

/

### Water Vapour Permeability of Textiles (JIS L1099 Method B-1:2006)

Test Method : Potassium Acetate  
Test Duration : 15 min.  
Orientation : Face facing Potassium Acetate

Client's Specified Requirement

#### Result

Gram per square meter per hours 812  
Gram per square meter per 24 hours 19400

/  
/

\*\*\* End of Report \*\*\*

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### Laboratory Summary Information for Certificate of Compliance (COC)

I (we) hereby confirm based on the test results in this report, that the product or components described below was tested and comply with the applicable rules, bans, regulations and standards under the CPSIA (Consumer Product Safety Improvement Act) or any other Act enforced by the CPSC and checked on the list below.

Product/Component description provided by submitter

Sample description : One sample of woven 20d 100% nylon ripstop  
DTRNF012-3L cutting in ocean blue.  
Color / Location : Ocean blue  
Specification No. : /  
Part No. : /  
Style / Item No. : /  
P.O. / Ref. No. : /  
Manufacturer : T&A  
Supplier : /

### Safety Regulation Citations

- Wearing Apparel Flammability 16 CFR 1610
- Flammability Standard for Children's Sleepwear 16 CFR 1615 and 1616
- Small Parts 16 C.F.R. Part 1501 and 1500.50 - 53
- Sharp Points and Edges 16 CFR 1500.48 and 49
- Lead Paint Ban 16 CFR. 1303
- Lead in substrate CPSIA Section 101
- Phthalates CPSIA Section 108
- Flammability of Carpets and Rugs (16 CFR 1630 and 1631)
- Flammability of Mattress Pads (16 CFR 1632)
- Standard for the flammability of vinyl plastic film (16 CFR 1611)

Date of testing:

Date of TP testing: Mar 19, 2014

TPCA (Third Party Conformity Assessment Body):

Place of TP testing: Hong Kong

Test Report Number: HKSL1403033399TX

TPCA name: SGS (Hong Kong) Limited

TPCA telephone number: 852-2334 4481

TPCA address: 1/F, 4/F, 5/F & Unit 301-4, 307-11, 3/F, On Wui Centre, 25 Lok Yip Road, Fanling, NT, Hong Kong

The information on this sheet is ONLY applicable for the product tested in this report. This document cannot be considered as a COC but only as a traceability tool in order for manufacturer/importer to prepare their COC.

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