



INTERTEK TEST REPORT

3933 US ROUTE 11

CORTLAND, NEW YORK 13045

REPORT NO.: G101630259CRT-001

RENDERED TO:

**PORTWEST, LLC
1272 OMEGA PARKWAY
SHEPERDSVILLE, KY 40165**

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STANDARDS USED:

ASTM F1790 - *Standard Test Method for Measuring Cut Resistance of Materials Used in Protective Clothing* 2005 Edition

CEN EN 388 - *Protective Gloves Against Mechanical Risks* 2003 Edition

ASTM D3389 - *Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform Abrader)* 2005 Edition

ASTM D3884 - *Standard Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)* 2009 Edition

CENELEC EN 420 – *Protective Gloves – General Requirements and Test Methods* 2003 Edition

AUTHORIZATION:

The tests were authorized by Quote Number 500524422 signed by Ray Carney and Robbie Irwin.

SPECIMEN DESCRIPTION:

The tests were performed on specimens identified by the client as: UA721 (Hi-Vis yellow and orange glove) and UA722 (Black and Gray Glove). The samples previously described, were received in pristine condition on 04/14/2014 and evaluated between 06/04/2014 and 06/12/2014. The testing was performed at Intertek located in Cortland, NY.

CONCLUSION:

The samples submitted by Portwest House, were evaluated in accordance with ASTM F1790 - Standard Test Method for Measuring Cut Resistance of Materials Used in Protective Clothing 2005 Edition; CEN EN 388 - Protective Gloves Against Mechanical Risks 2003 Edition; ASTM D3389 - Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform Abrader) 2005 Edition; ASTM D3884 - Standard Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method) 2009 Edition; CENELEC EN 420 – Protective Gloves – General Requirements and Test Methods 2003 Edition. Test data sheets are attached as an appendix (6 pages following).

	ANSI 105 Rating			
	Cut	Puncture	Dexterity	Abrasion
Test Standard	ASTM F 1790-05	EN 388-03	EN 420-03	ASTM 3389-05 / ASTM 3884-09
Style				
UA721	3	3	5	3
UA722	4	4	5	3

Report Prepared by:

Report Approved by:




Jill Kirby
 Technician I
 Performance Group

Rob Simmonds
 Engineer
 Performance Group

ASTM F1790-2005

PRODUCT DESCRIPTION: Glove Palm – Style UA722

BLADE DESIGNATION: GRU-GRU TXTL BLD

BLADE LOT ID: 3574-105-2014-590024-001001

CALIBRATION: (cut length for 1.57mm ± 0.05mm (0.062in ± 0.002in) thick Neoprene with 500 gm load):
(For Calibration – Blade travel distance between 10mm & 15mm)

Before Sample Testing (A): 14.57 mm
CB = [A+B]/2]: 14.75 mm

After Sample Testing (B): 14.92 mm
Normalized Correction Factor (12.7/CB): 0.86

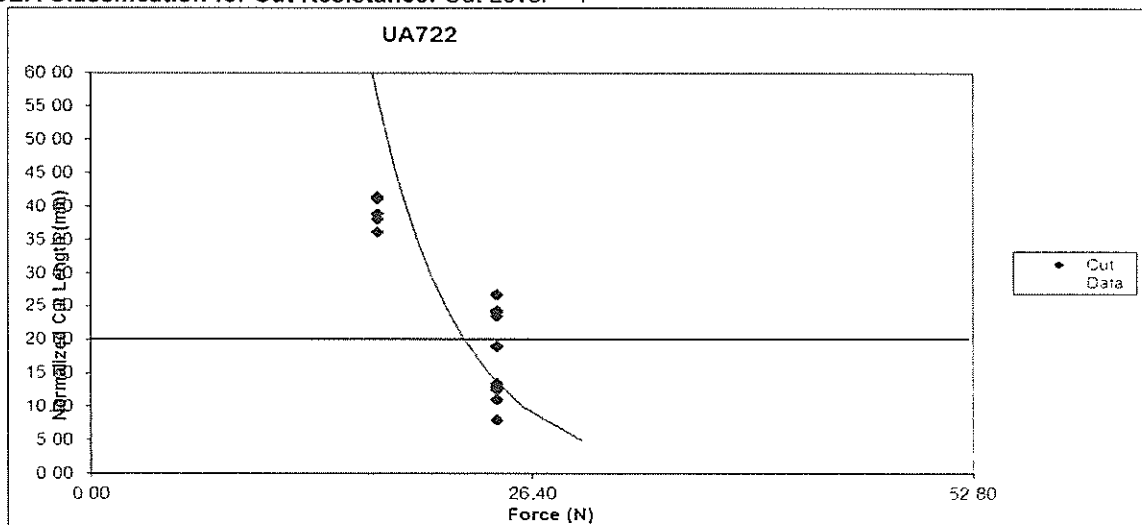
Column	1	2	3
Reading Number	Force (N)	Cut Length (mm)	Normalized Cut Length (mm)
1	24.27	9.15	7.87
2	24.27	12.77	10.98
3	24.27	14.46	12.44
4	24.27	14.89	12.81
5	24.27	15.68	13.48
6	24.27	21.89	18.83
7	24.27	27.20	23.39
8	24.27	28.05	24.12
9	24.27	28.12	24.18
10	24.27	31.01	26.67
11	17.19	41.97	36.09
12	17.19	44.19	38.00
13	17.19	45.10	38.79
14	17.19	47.69	41.01
15	17.19	48.12	41.38

Normalized Reference Load (RL): 22.34 N (2278 g)

Corrected Load: 1.031

R-Squared: 0.6201

ANSI/ISEA Classification for Cut Resistance: Cut Level – 4



CEN EN 388-2003

PRODUCT DESCRIPTION: Glove Palm - UA722 (black coated, padded palm & Grey textile)

CONDITIONING: In accordance with EN 388:2003; section 5.3, at a temperature 23°C ± 2°C and a relative humidity of 50% ± 5% for at least 24 hours. Per EN 388:2003; sec. 5.4: Test performed in a different environment shall be started within 5 minutes after removal from conditioning.

Specimen No.	Puncture No.	Force to Puncture (N)
1	1	105.2
	2	62.4
	3	121.5
2	1	115.9
	2	124.9
	3	130.8
3	1	123.7
	2	117.0
	3	134.1
4	1	130.5
	2	132.7
	3	124.2
Average		118.6

ANSI/ISEA 105-2011 Classification for Puncture Resistance (Table 2): 4

CEN EN 420-2003

PRODUCT DESCRIPTION: Whole Glove – UA722

Glove Size: Small		Pin Diameter (mm)				
Able To Pick Up Pin?	11	9.5	8	6.5	5	Level
Sample 1	Yes	Yes	Yes	Yes	Yes	5
Sample 2	Yes	Yes	Yes	Yes	Yes	5

Glove Size: Large		Pin Diameter (mm)				
Able To Pick Up Pin?	11	9.5	8	6.5	5	Level
Sample 1	Yes	Yes	Yes	Yes	Yes	5
Sample 2	Yes	Yes	Yes	Yes	Yes	5

ASTM D 3389-2005/ASTM D 3884-2009

PRODUCT DESCRIPTION: U A722 (Black / Grey)

STANDARD: ASTM D 3884-09

THICKNESS: 7.00mm

WHEEL LOAD: 500 grams

Abrasion Cycles: (end point shall be when the first thread or yarn is broken; per ANSI 105-2011; 5.1.3 Or, desired classification minimum reached.)				
Specimen 1	1050		Specimen 4	1341
Specimen 2	265*		Specimen 5	1200
Specimen 3	2550		AVERAGE	1281

Notes: 1) Specimens were not smooth, and flat. Glove palm is padded with stitching pattern.

2) Specimens tested with stitching, and padding left in place.

3) Stitching thread begins to break-down within the first 25 abrasion cycles.

*Hole opened from hole created by stitch pattern.

ANSI/ISEA 105-2011 Classification for Abrasion Resistance (Table 3): 3