

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 041614-MH49998  
**Report Reference** MH49998-20140203  
**Issue Date** 2014-April-16

**Issued to:** Portwest Ltd.  
Portwest House  
Westport Business and Technology Park  
Castlebar Road  
Westport, Co. Mayo, Ireland


**This is to certify that representative samples of** Flash Fire Protective Garments  
Coveralls: UFR50, UFR51, UFR88, UFR48, UBiz1, UBiz5

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

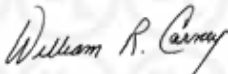
**Standard(s) for Safety:** NFPA 2112, Standard on Protective Garments for Protection of Industrial Personnel Against Flash Fire, 2012 Edition

**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow -Up Service.

The UL Classification Mark includes: UL in a circle: with the word "CLASSIFIED"  (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and the product category name (product identity) as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product.



William R. Carney, Director, North American Certification Programs

UL LLC

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Test Certificate n°

14EP0152

AITEC declares that the articles:

**FABRIC CODE: VU25NAT340 FOR UBIZWELD 1 / UBIZWELD 5**

Woven fabric, twill 3/1, 100% cotton, 340 g/m<sup>2</sup> – 10 oz/yd<sup>2</sup>

According to information supplied by the customer.

Given by the company:

**PORTWEST LTD d/b/a  
PORTWEST LLC  
1272 Omega parkway  
Shepherdsville, KY 40165  
USA**

Complies with the requirements of the standard/s:

**NFPA 2112 -2012 EDITION. "Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire"**

TEST	RESULTS	REQUERMENTS	FULFILLMENT	TEST REPORT	
Clause 7.1.1	Section 8.2 Heat Transfer Performance (HTP) Test as received	Contact 43.88 J/cm <sup>2</sup> Spaced 44.61 J/cm <sup>2</sup>	> 12.6 J/cm <sup>2</sup> measured in "contact," > 25 J/cm <sup>2</sup> measured "space."	PASS	2014EP0152
	Section 8.2 Heat Transfer Performance (HTP) Test after 3 washing cycles according to section 8.1.3	Contact 43.03 J/cm <sup>2</sup> Spaced 43.96 J/cm <sup>2</sup>		PASS	2014EP0152
Clause 7.1.2	8.3 Flame Resistance Test as received	No melt and drip Afterflame 0 s Char length warp 48 mm Char length weft 51.2 mm	No melt and drip Afterflame < 2s. Char length ≤ 100 mm	PASS	2014EP0152
	8.3 Flame Resistance Test after 100 washing cycles according to section 8.1.3	No melt and drip Afterflame 0 s Char length warp 64 mm Char length weft 64 mm		PASS	2014EP0152
Clause 7.1.3	8.4 Heat and Thermal Shrinkage Resistance Test as received	Warp -0.1% Weft -0.2% No melt, drip, ignition or separation	± 10% in both directions No melt, drip, ignition or separation	PASS	2014EP0152
Clause 7.1.4	8.4 Heat and Thermal Shrinkage Resistance Test after 3 washing cycles according to section 8.1.3	Warp -0.3% Weft -0.5% No melt, drip, ignition or separation		PASS	2014EP0152
Clause 7.1.5	8.5 Mankin Test after 1 washing cycle according to section 8.1.3	8.6 % Predicted 2 <sup>nd</sup> and 3 <sup>rd</sup> burn injury	Body burn prediction of < 50 of the surface area covered by sensors (hands and feet are excluded)	PASS	2014EP0152

The test results above indicated are shown in the testing report/s:

**2014EP0152**

Issued by AITEC

This document is of application for the tested sample, according to the tests that have been done in the previously mentioned dates in the reports above shown.

This does not imply any monitoring or control activity on this product done by AITEC.



Signed by Raquel Muñoz González  
Manager Innovation Area

26/02/2014



Test Certificate nº

14EP0153

AITEC declares that the articles:

**FABRIC CODE: VU25NAT340 FOR UBIZWELD 1 / UBIZWELD5**

Woven fabric, twill 3/1, 100% cotton, 340 g/m<sup>2</sup> – 10 oz/yd<sup>2</sup>  
According to information supplied by the customer.

Given by the company:

**PORTWEST LTD d/b/a  
PORTWEST LLC  
1272 Omega parkway  
Shepherdsville, KY 40165  
USA**

Complies with the requirements of the standard/s:

**ASTM F1506 – 10a. "Standard Performance Specification for Flame Resistant and Arc Rated Textile Materials for Wearing Apparel for Use by Electrical Workers Exposed to Momentary Electric Arc and Related Thermal Hazards"** according to NFPA 70E Table 130.7(C)(14).

TEST	RESULTS	REQUERIMENTS	FULFILLMENT	TEST REPORT
Clause 7.1	Breaking Load - ASTM D5034 Warp 574,56 N Weft 337,47N	223 N	PASS	2014EP0153
Clause 7.2	Tear Resistance - ASTM D1424 Warp 29,44 N Weft 23,96 N	22 N	PASS	2014EP0153
Clause 7.3	Seam Slippage - ASTM D 434 Warp 223,09 N Weft 239,49N	223 N	PASS	2014EP0153
Clause 7.4.1	Colour fastness to laundering - AATCC TM61 Change in color: 4-5 Staining: 4	Class 3	PASS	2014EP0153
Clause 7.5	Dimensional Change after 5 washing cycles - AATCC TM135 3IV Aiii Warp: 0,0% Weft: -1,6%	± 3% in both directions	PASS	2014EP0153
Clause 7.6	Flammability as received - ASTM D6413 No melt and drip Afterflame 0 s Char length warp 48 mm Char length weft 51 mm	No melt and drip Afterflame < 2s Char length ≤ 152 mm	PASS	2014EP0153
	Flammability after 25 washing cycles AATCC TM135 3IV Aiii - ASTM D6413 No melt and drip Afterflame 0 s Char length warp 72 mm Char length weft 66 mm		PASS	2014EP0153
Clause 7.8	Arc Rating - ASTM F1959/F1959M Afterflame < 5s. Arc rating (ATPV) = 11,0 cal/cm <sup>2</sup>	Afterflame < 5s.	PASS	2014EP0193
		—	Hazard category risk 2, NFPA 70E	2014EP0193

The test results above indicated are shown in the testing reports/s:

2014EP0153 - 2014EP0193

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Manager Innovation Area  
26/03/2014

